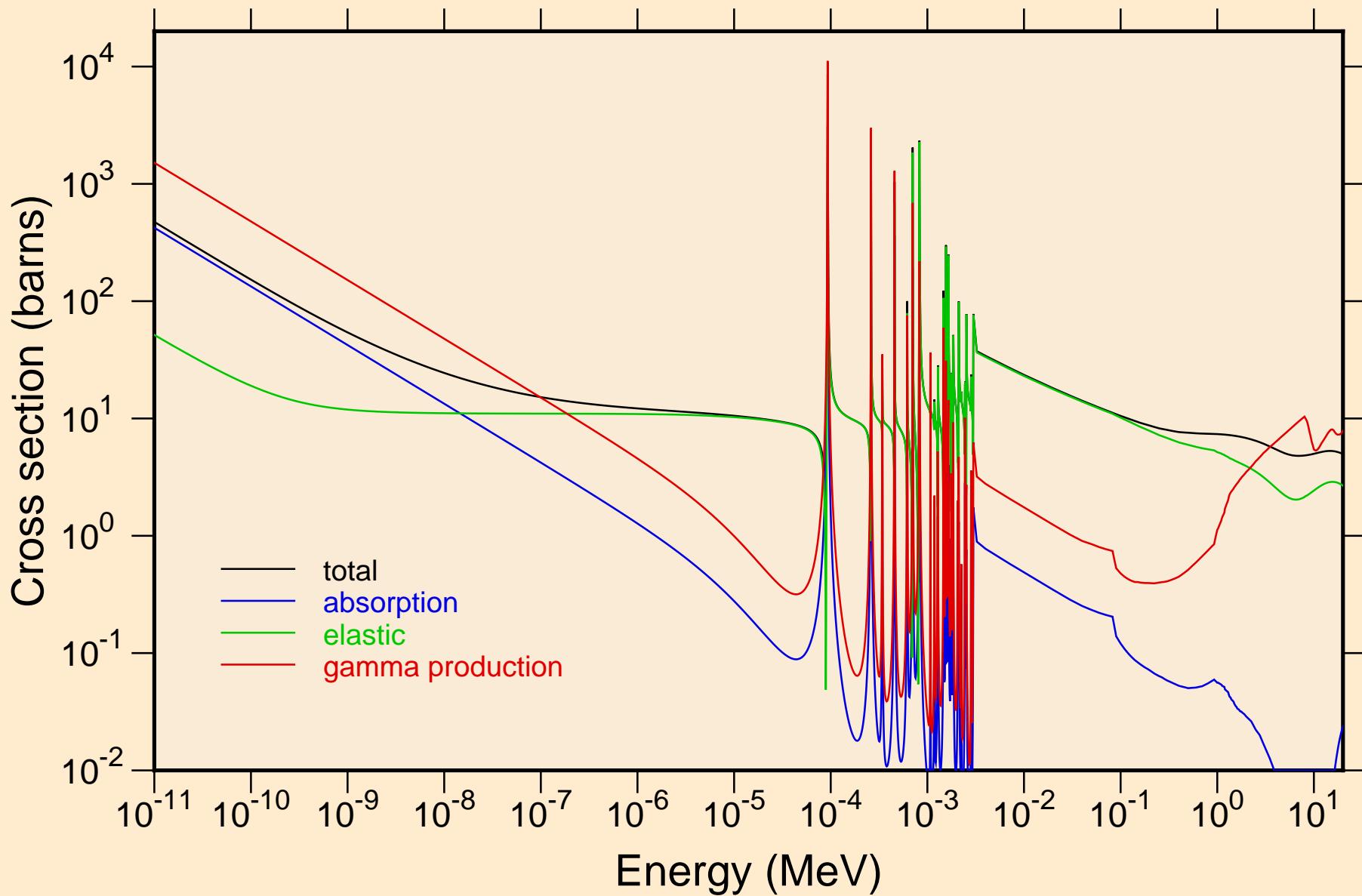
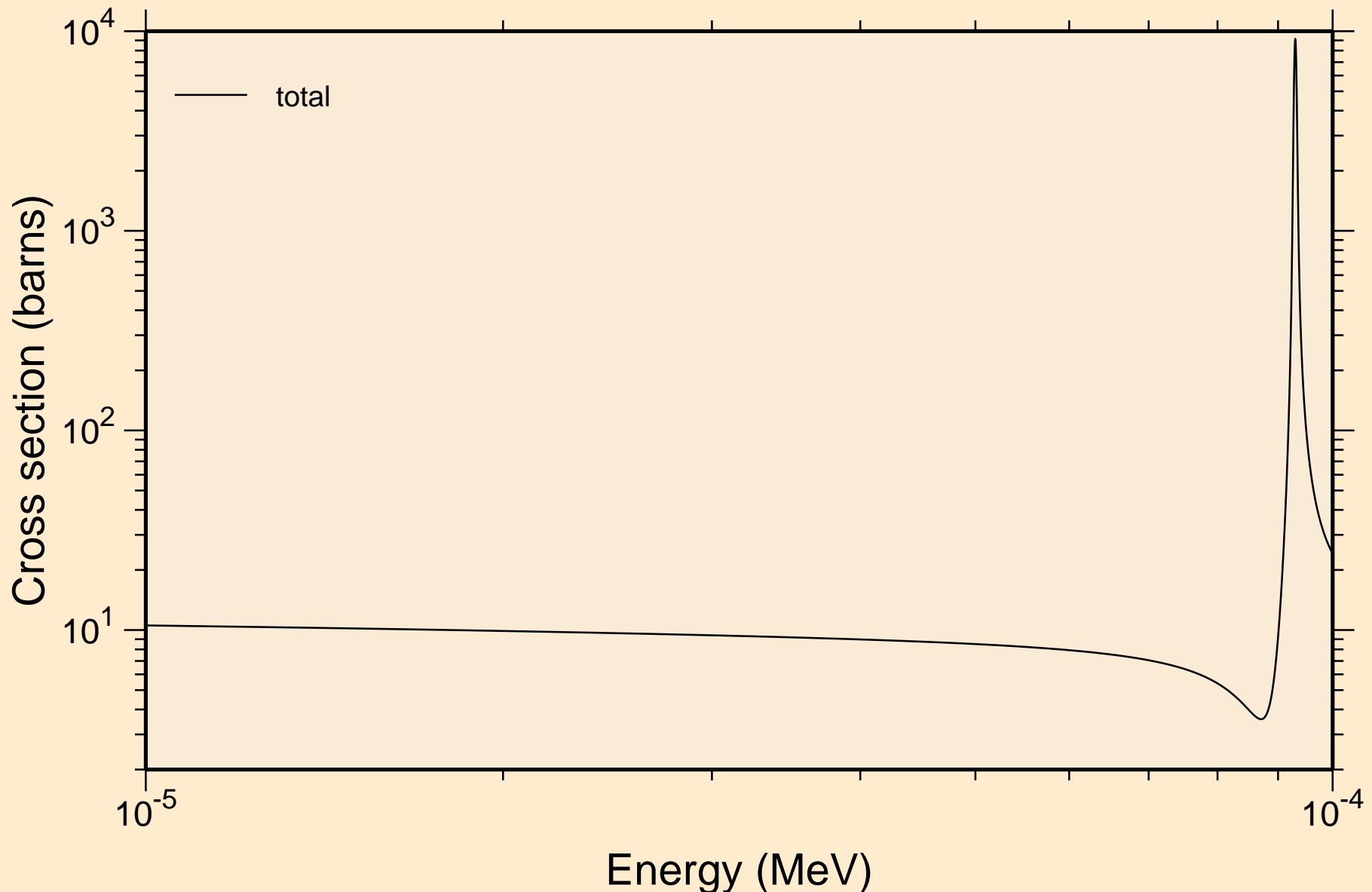


# JENDL-4 SM-154

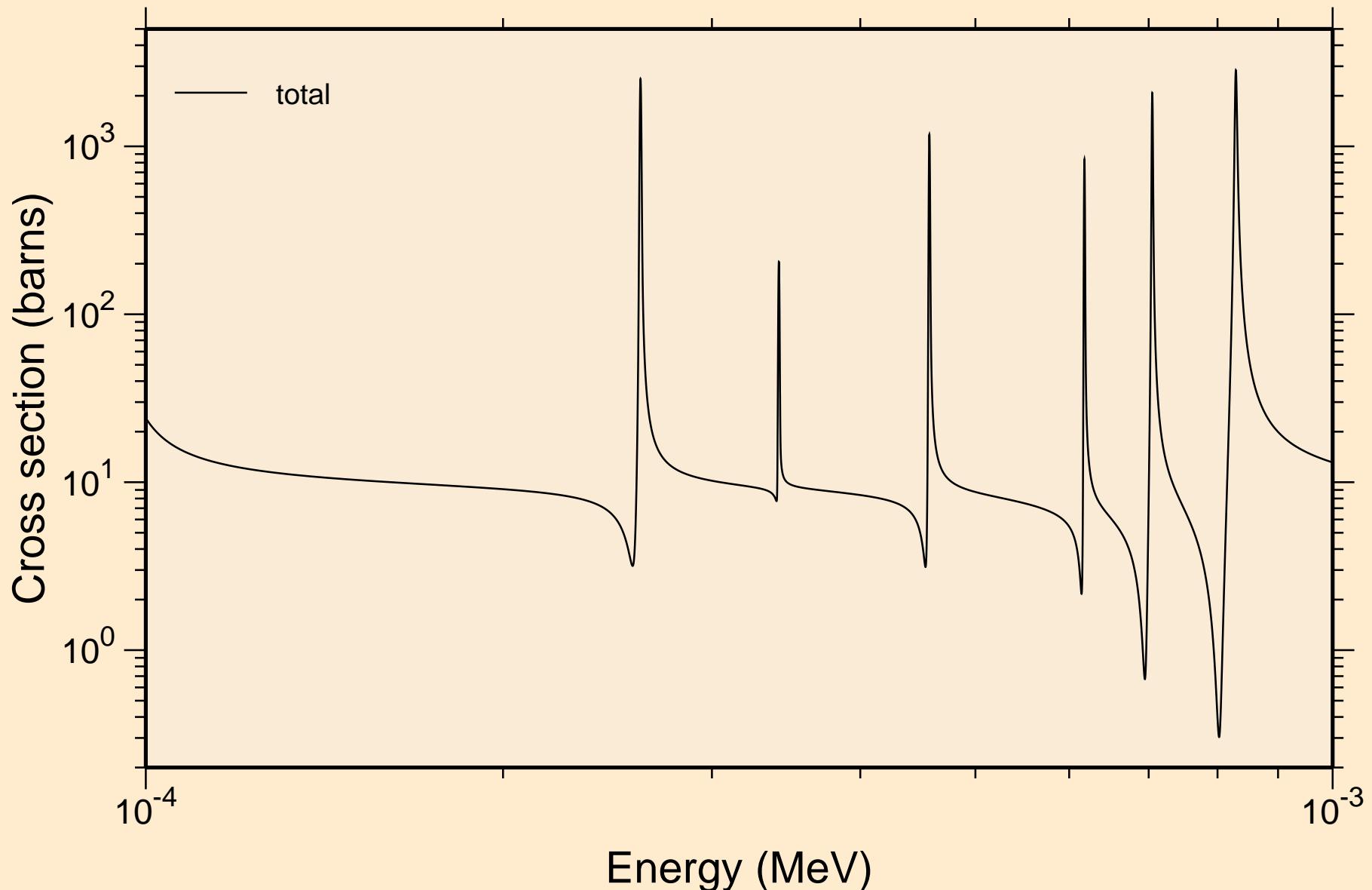
## Principal cross sections



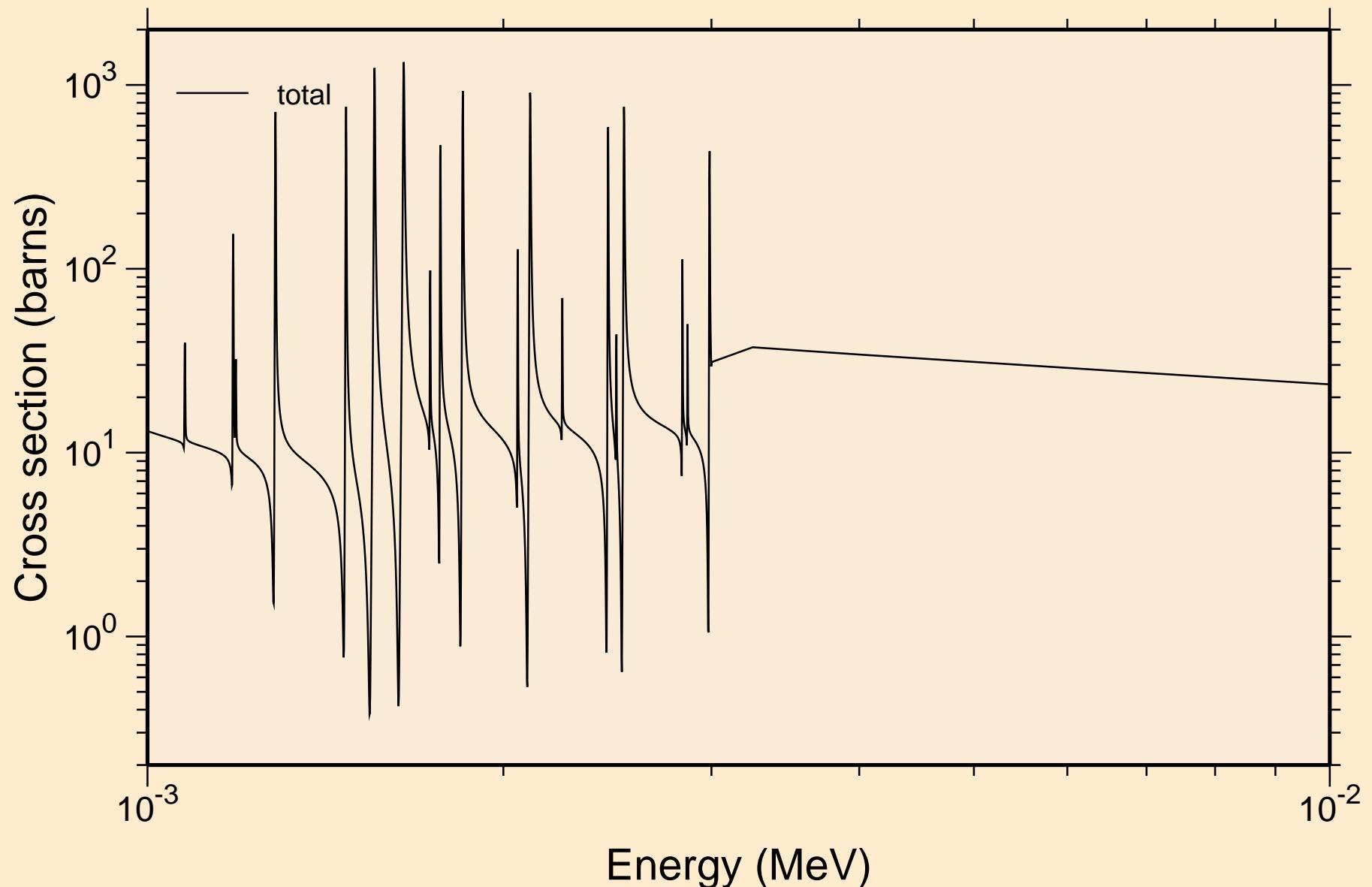
JENDL-4 SM-154  
resonance total cross section



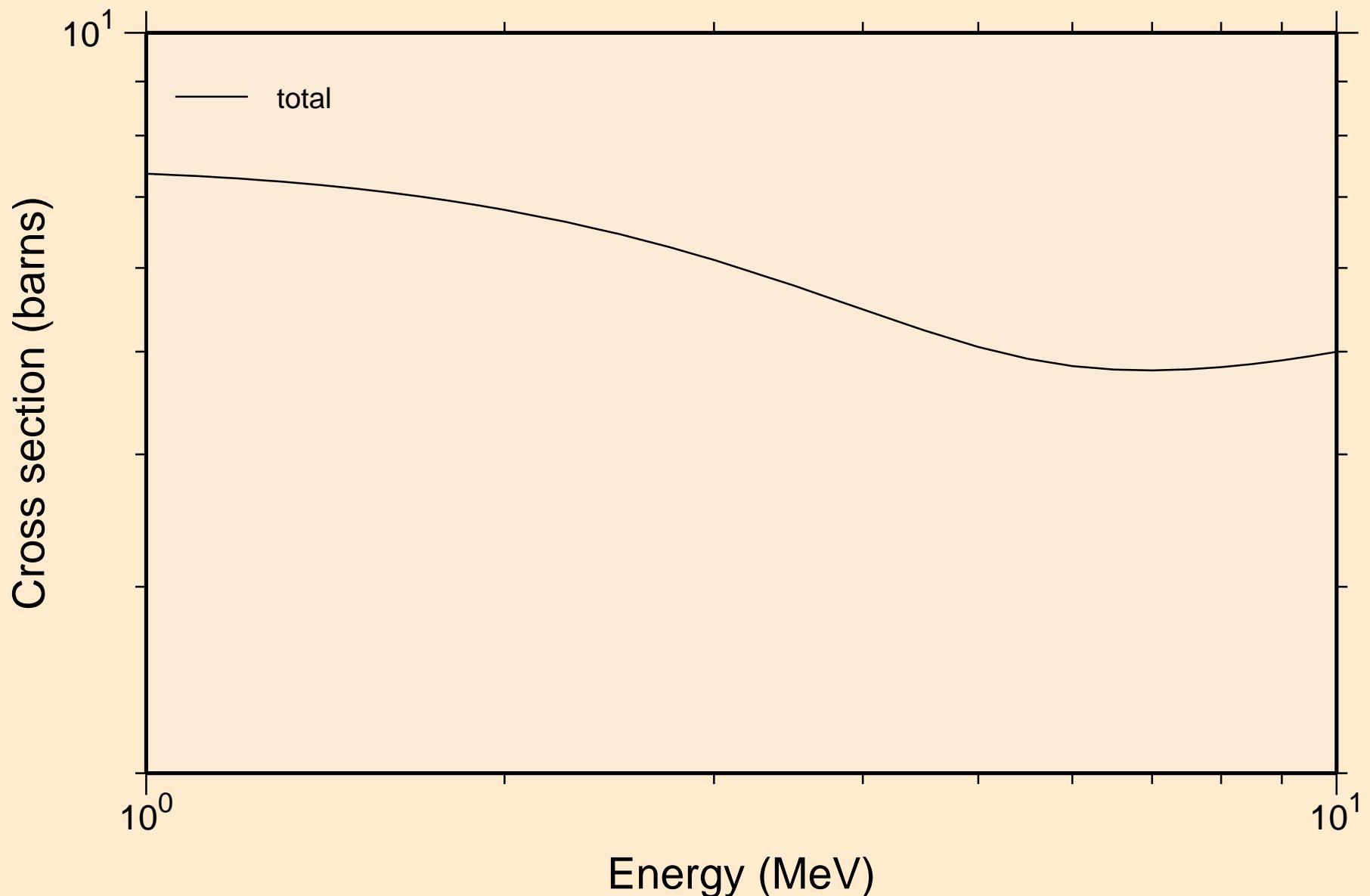
JENDL-4 SM-154  
resonance total cross section



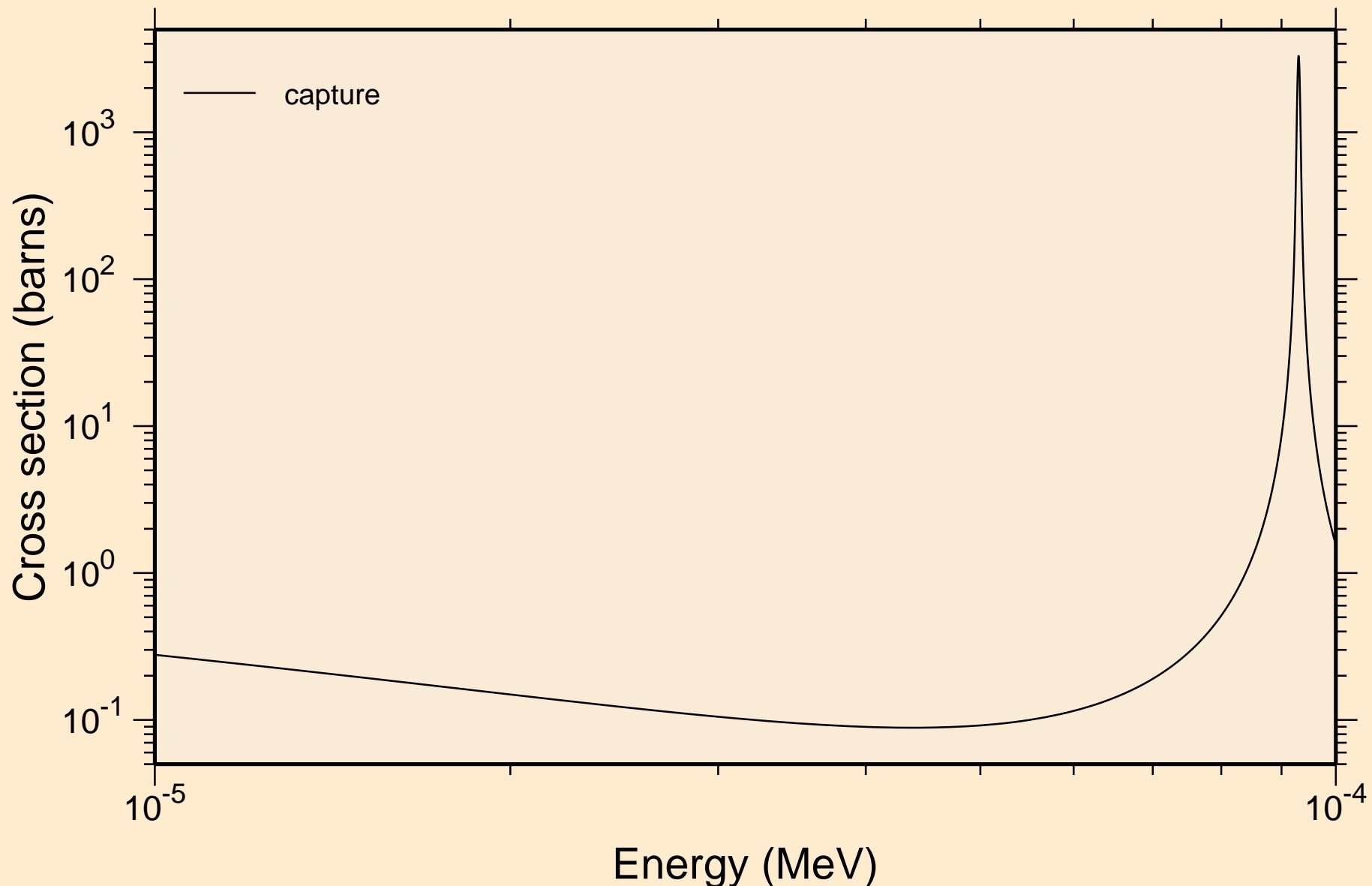
JENDL-4 SM-154  
resonance total cross section



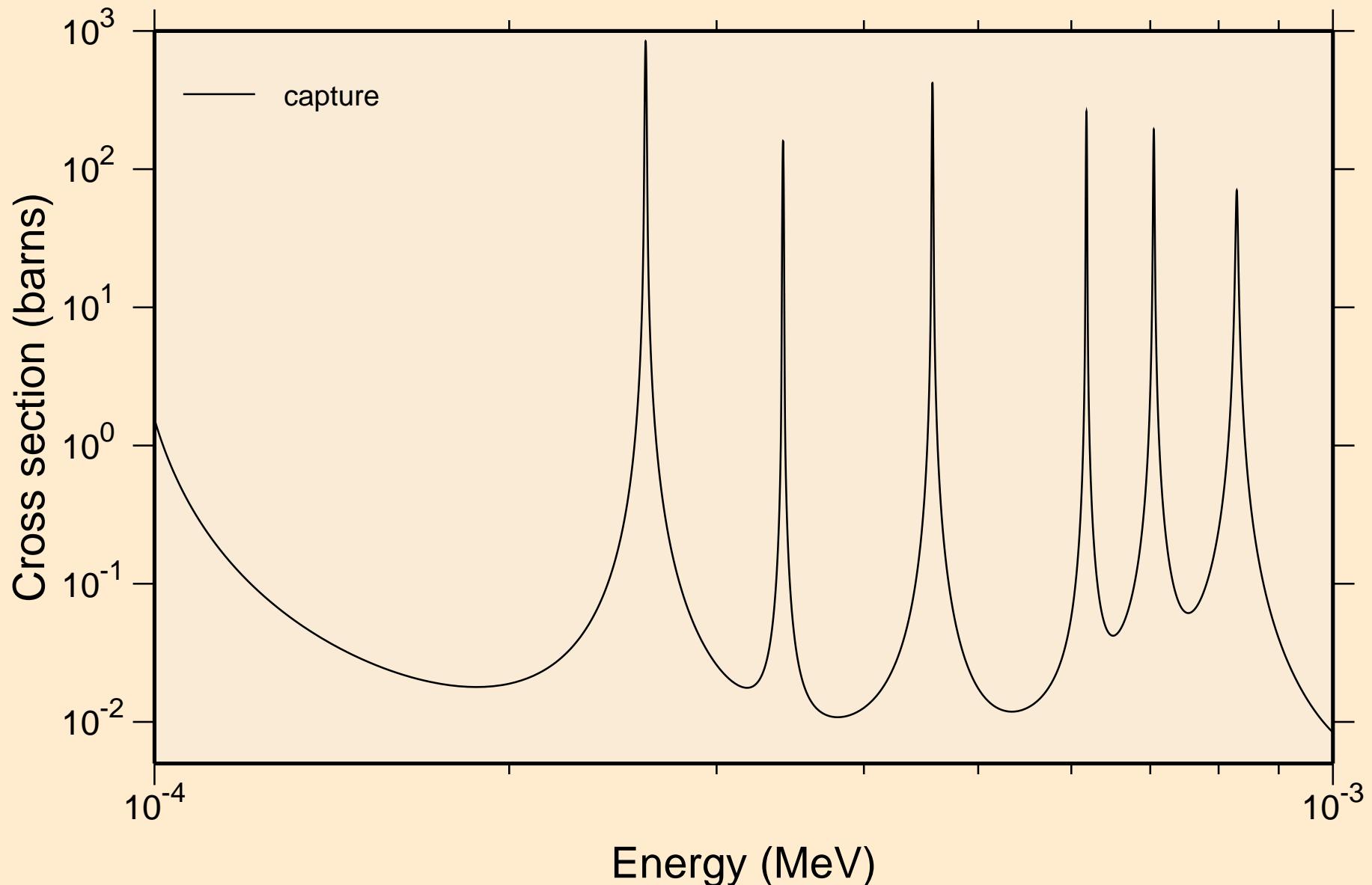
JENDL-4 SM-154  
resonance total cross section



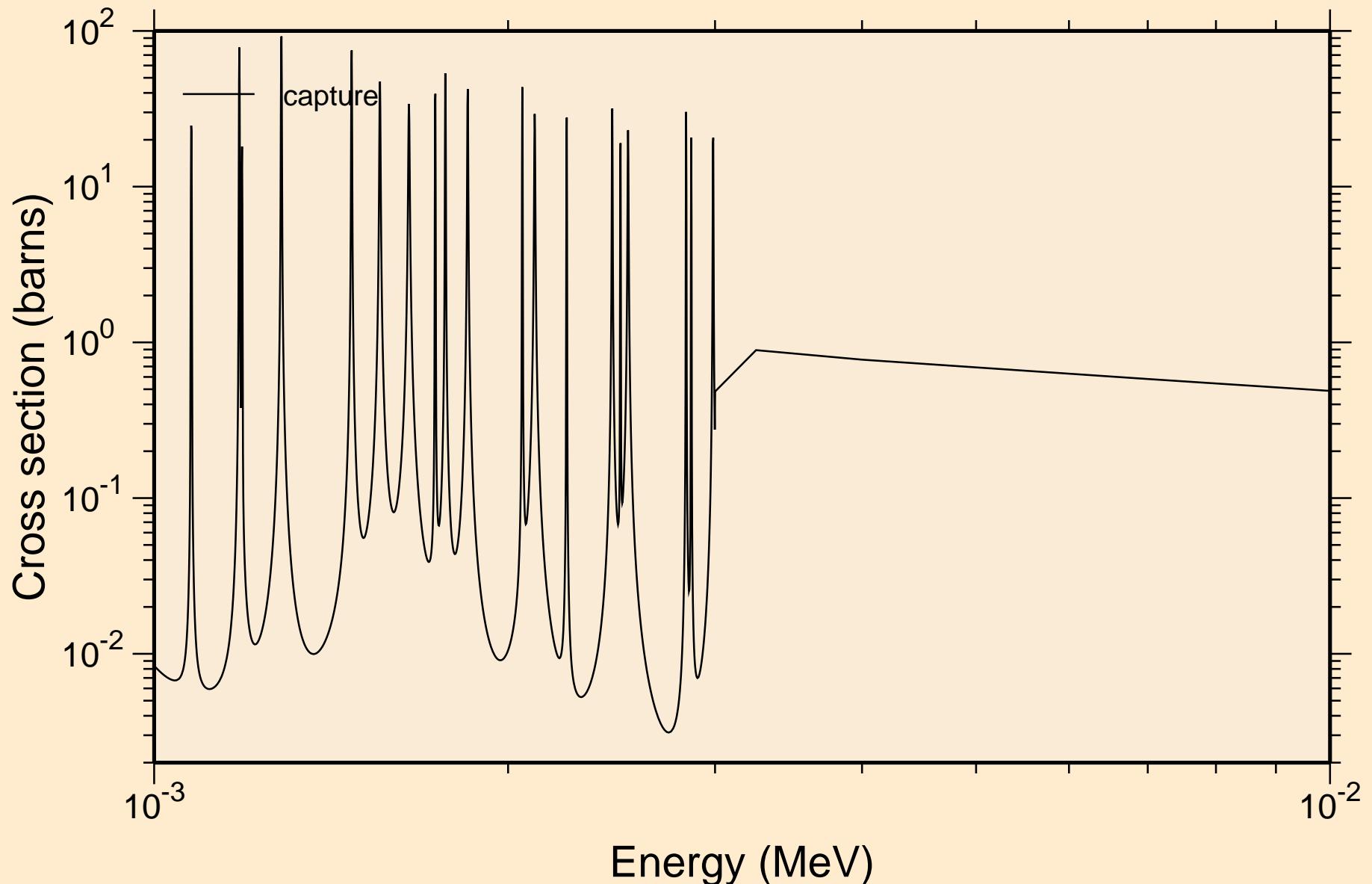
JENDL-4 SM-154  
resonance absorption cross sections



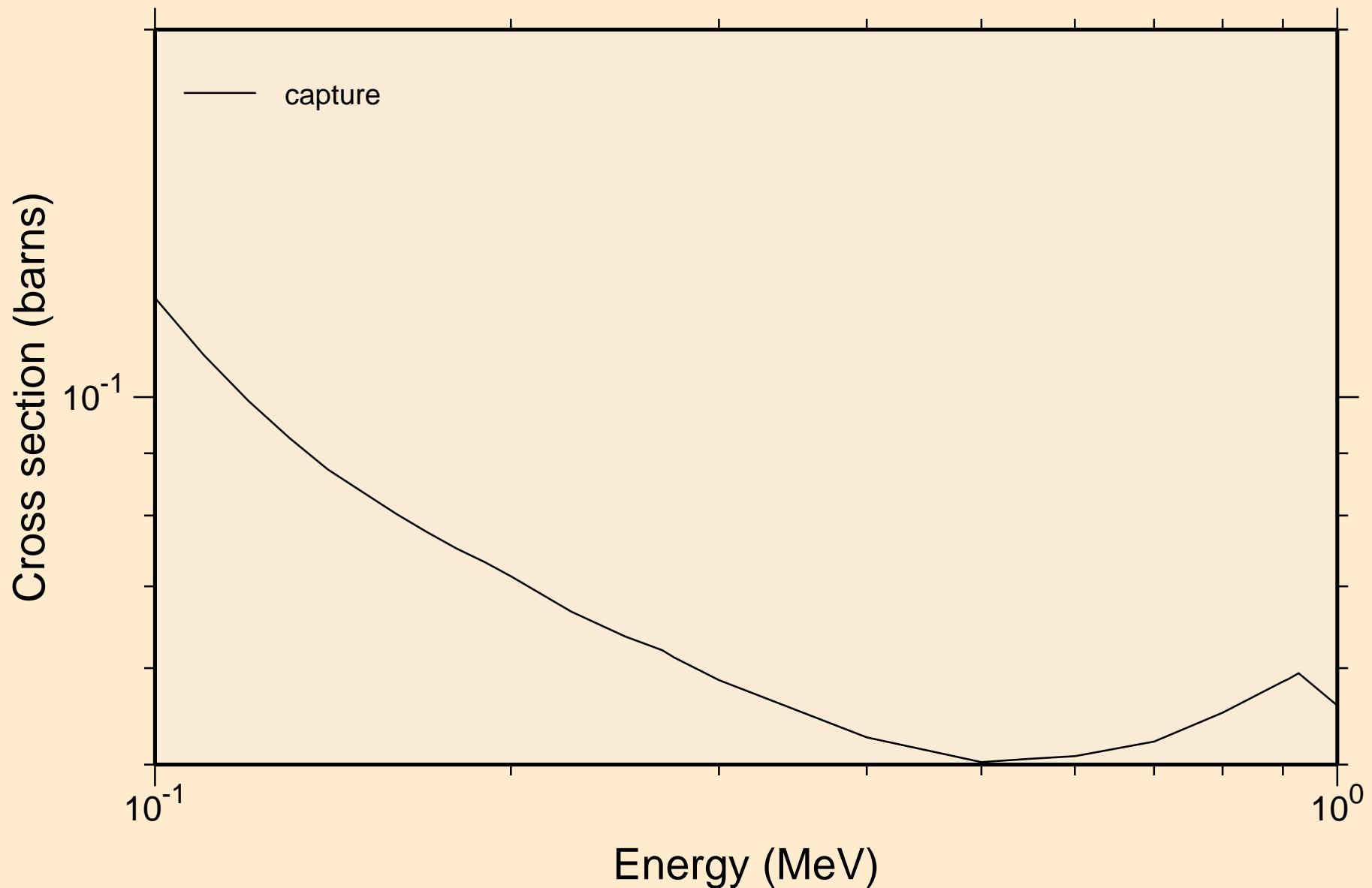
JENDL-4 SM-154  
resonance absorption cross sections



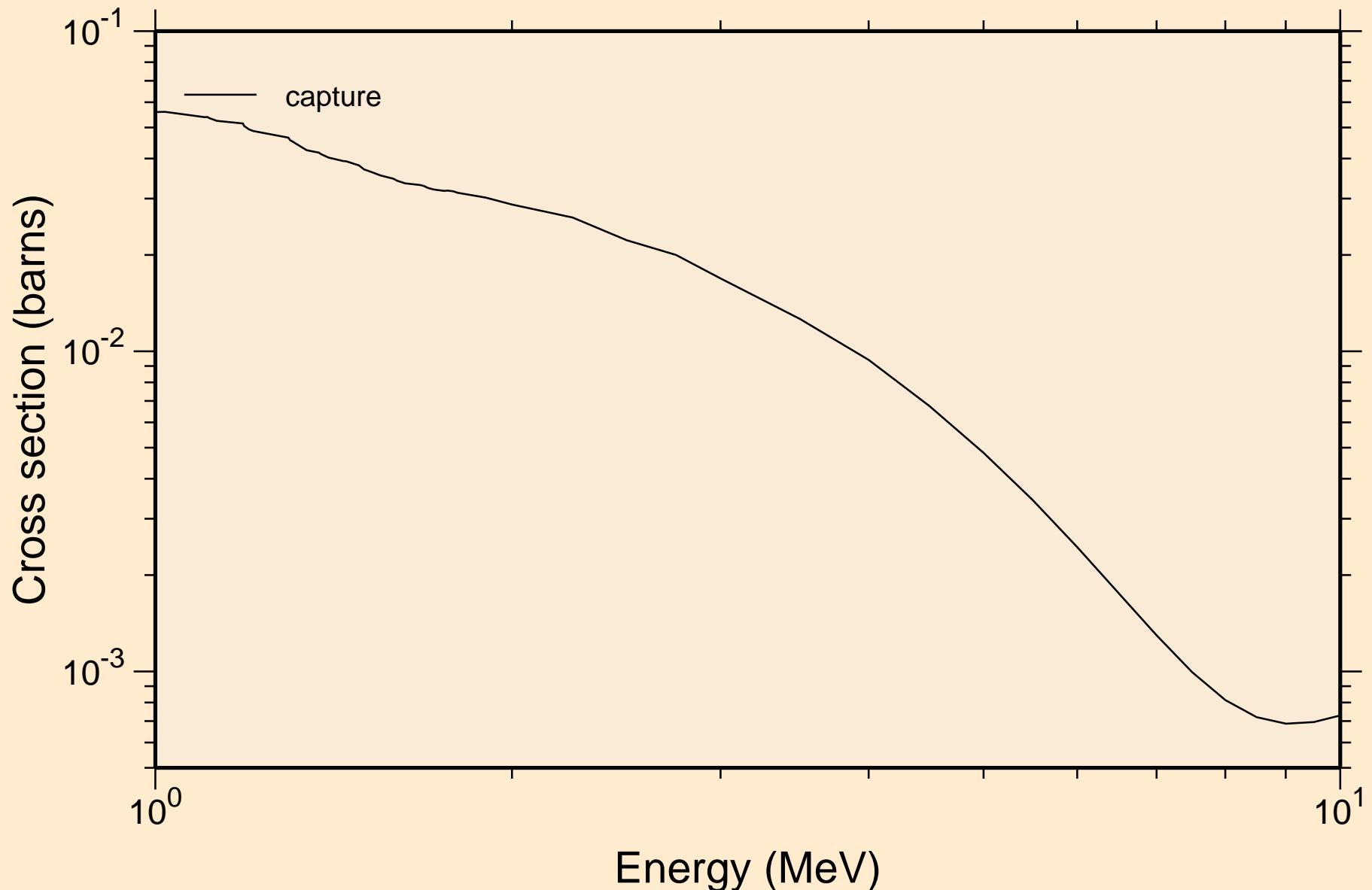
JENDL-4 SM-154  
resonance absorption cross sections



JENDL-4 SM-154  
resonance absorption cross sections

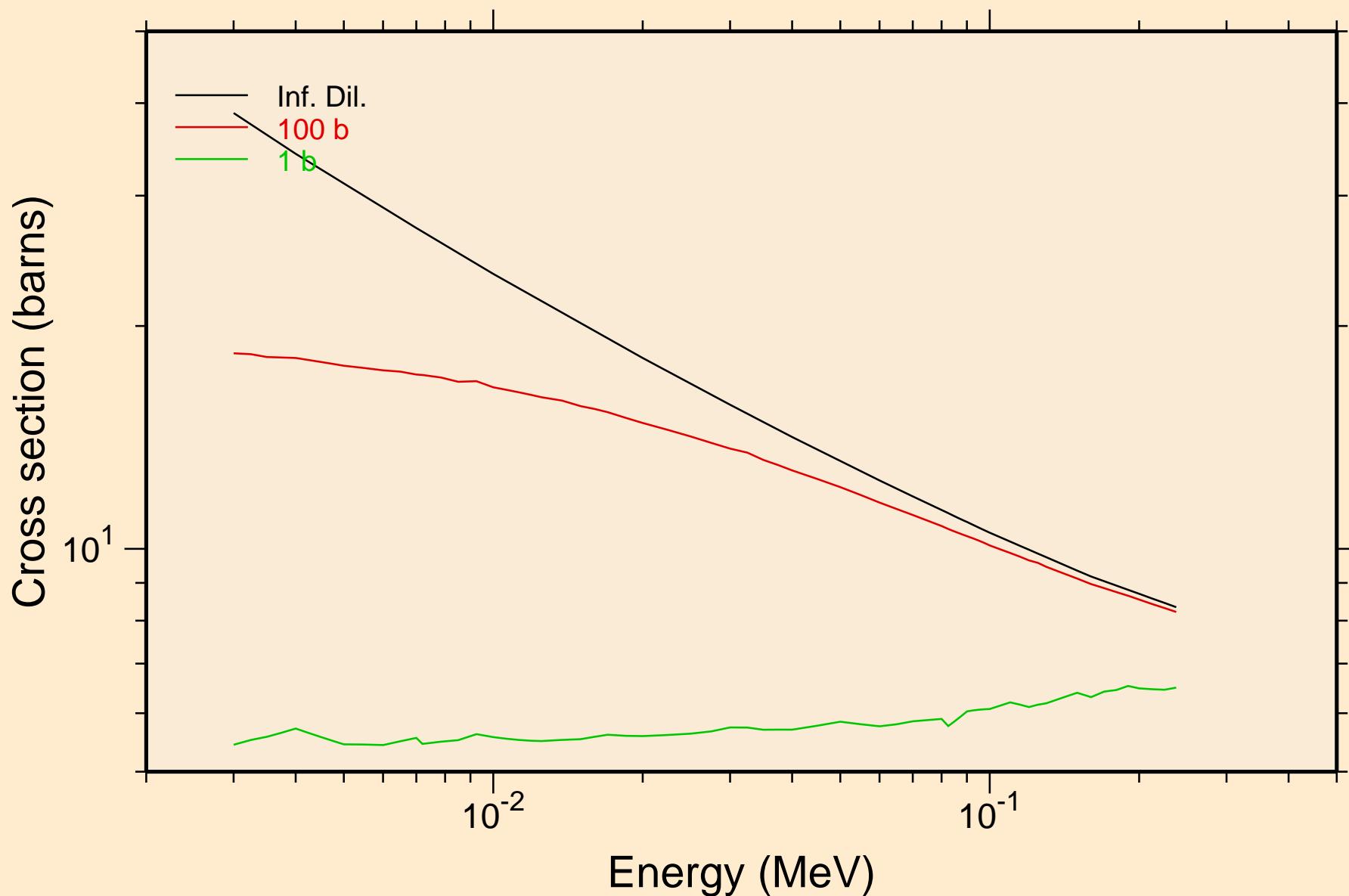


JENDL-4 SM-154  
resonance absorption cross sections



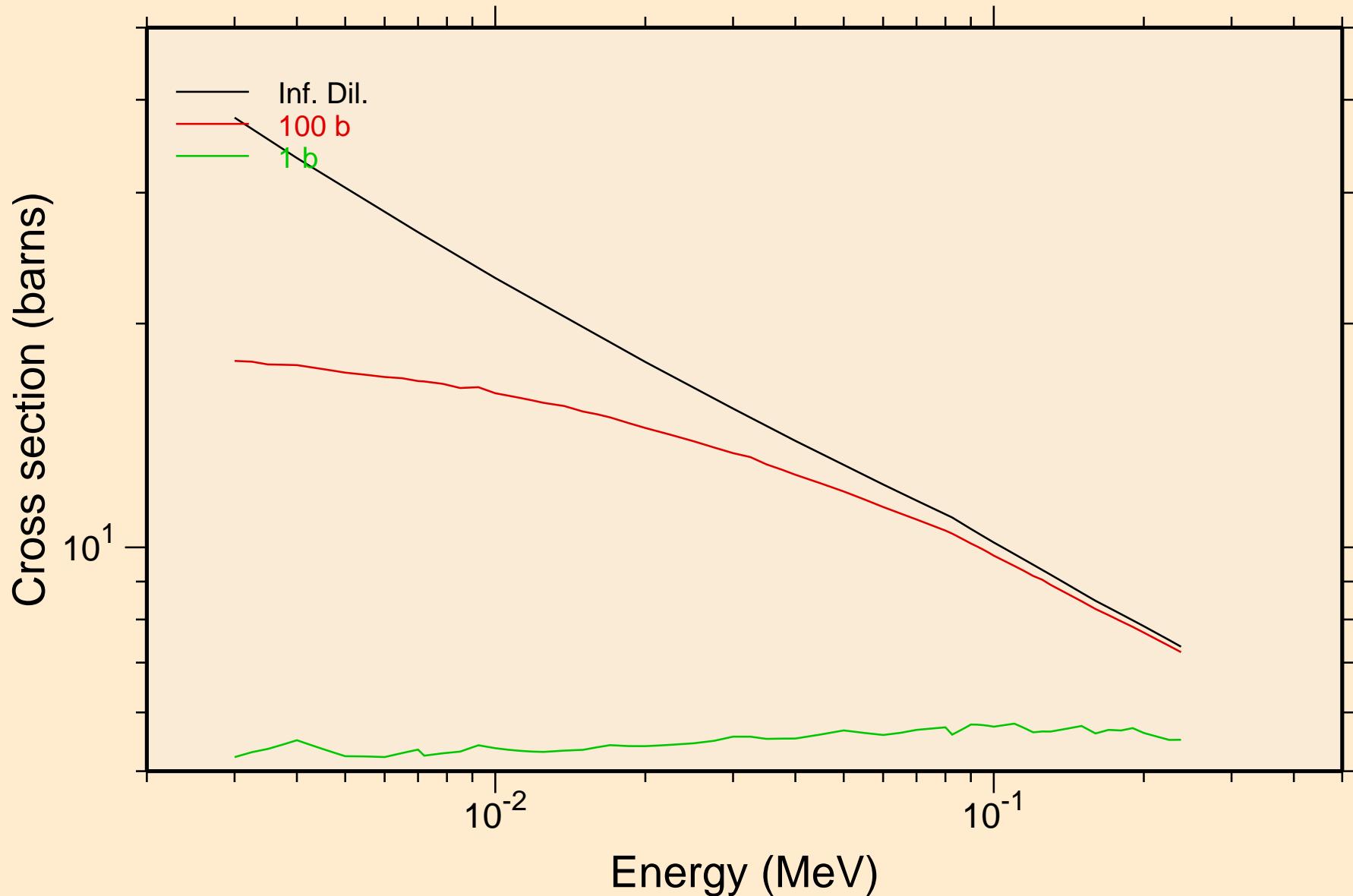
# JENDL-4 SM-154

## UR total cross section



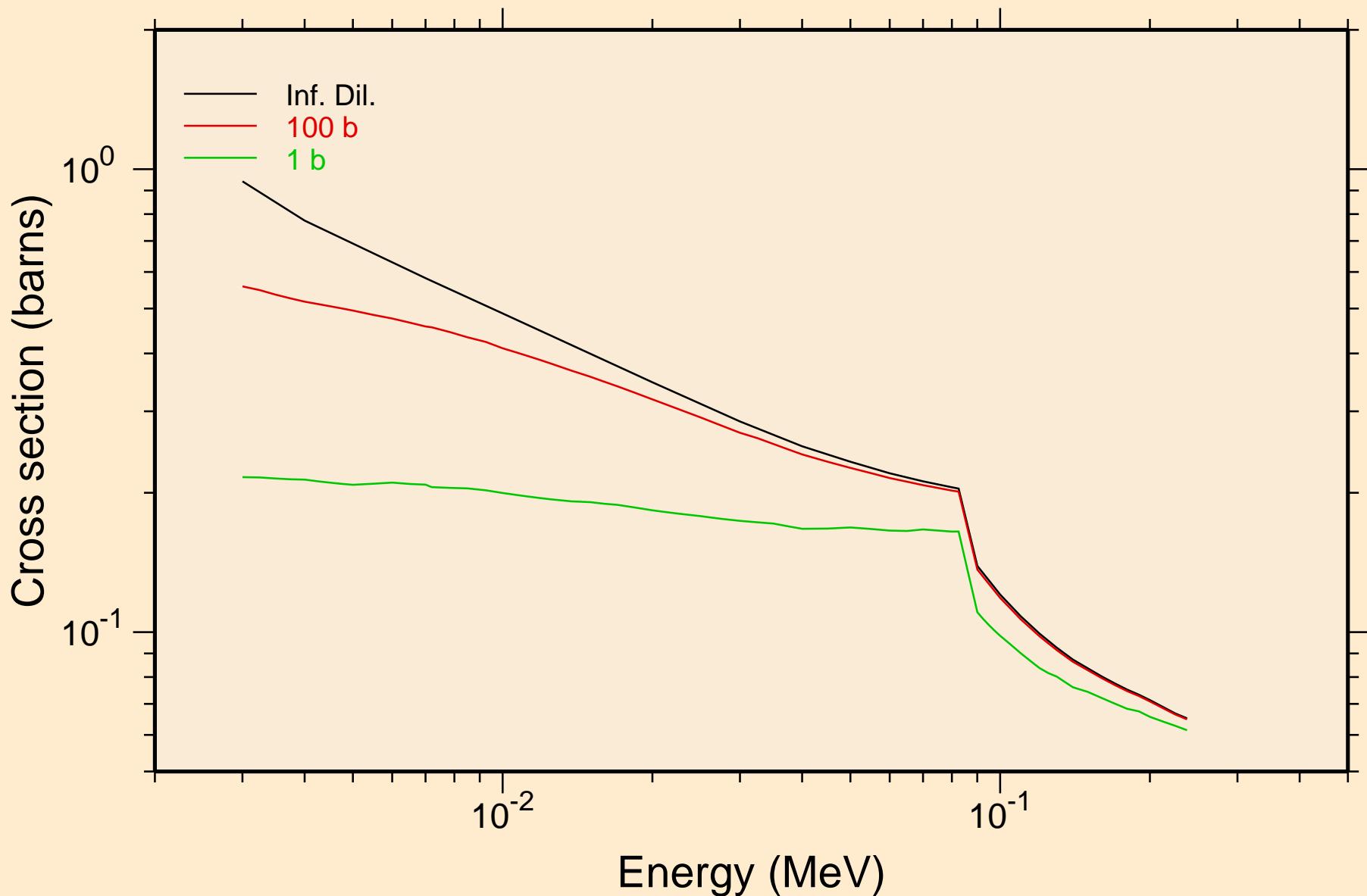
# JENDL-4 SM-154

## UR elastic cross section

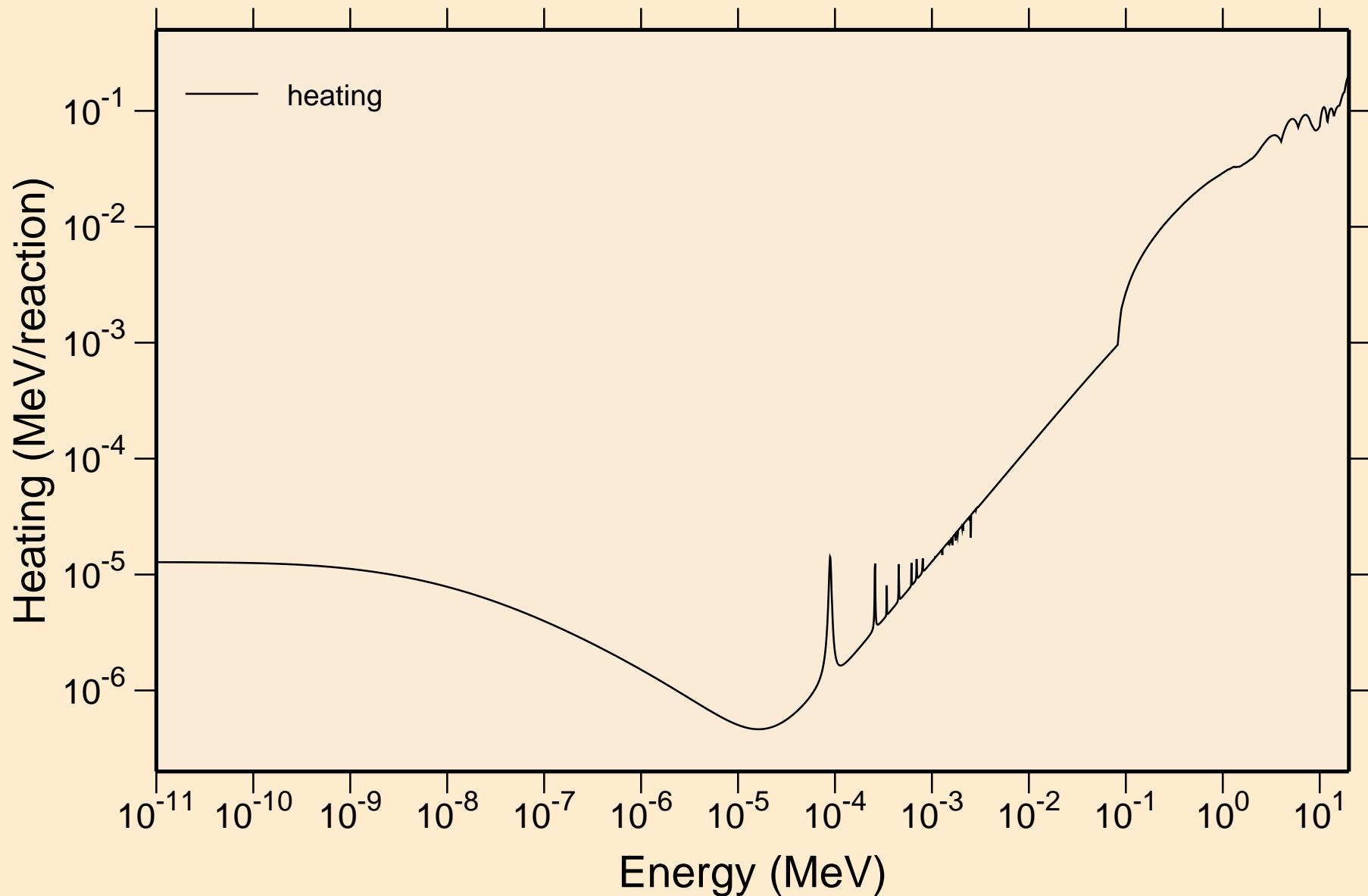


# JENDL-4 SM-154

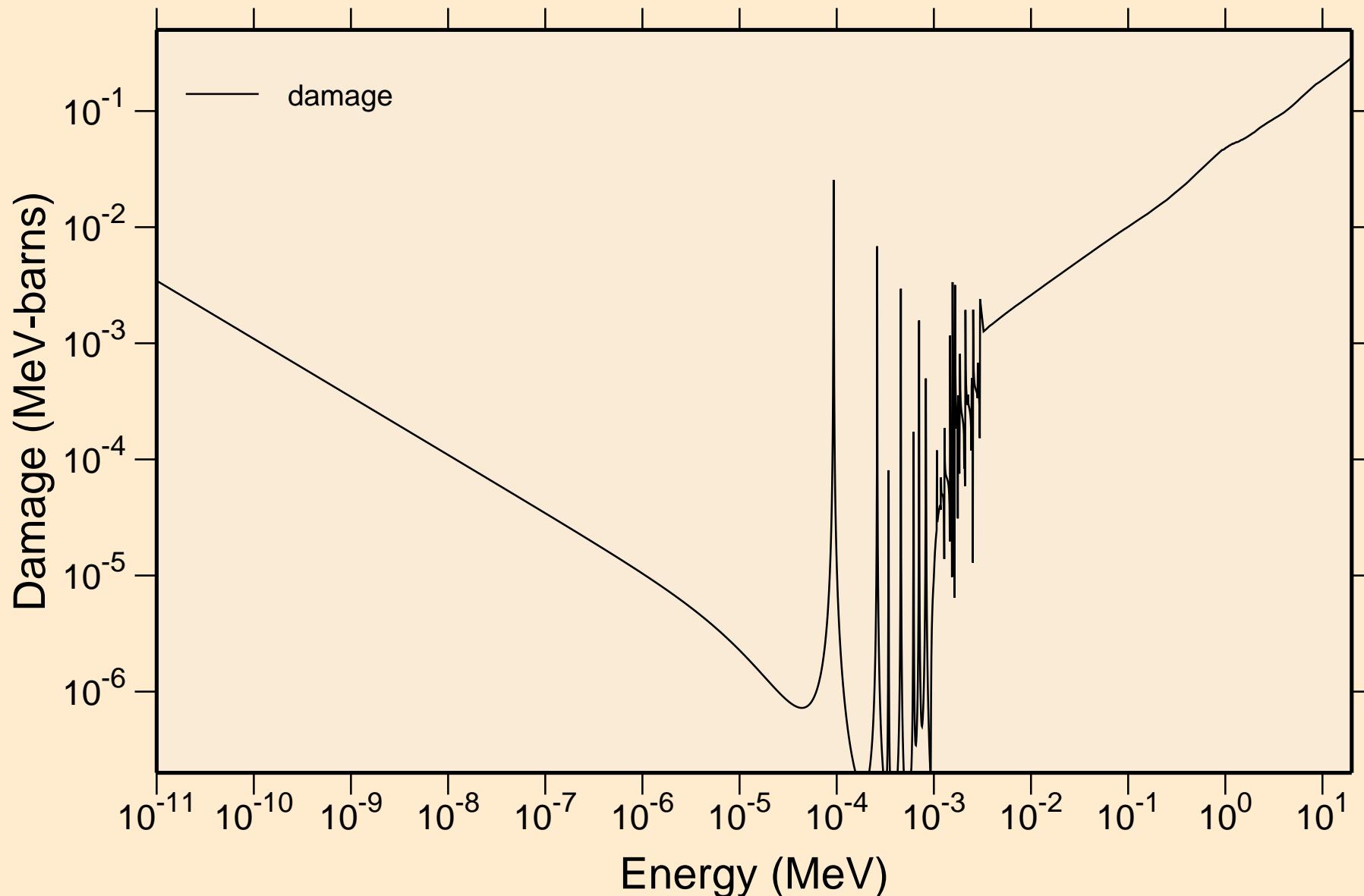
## UR capture cross section



JENDL-4 SM-154  
Heating

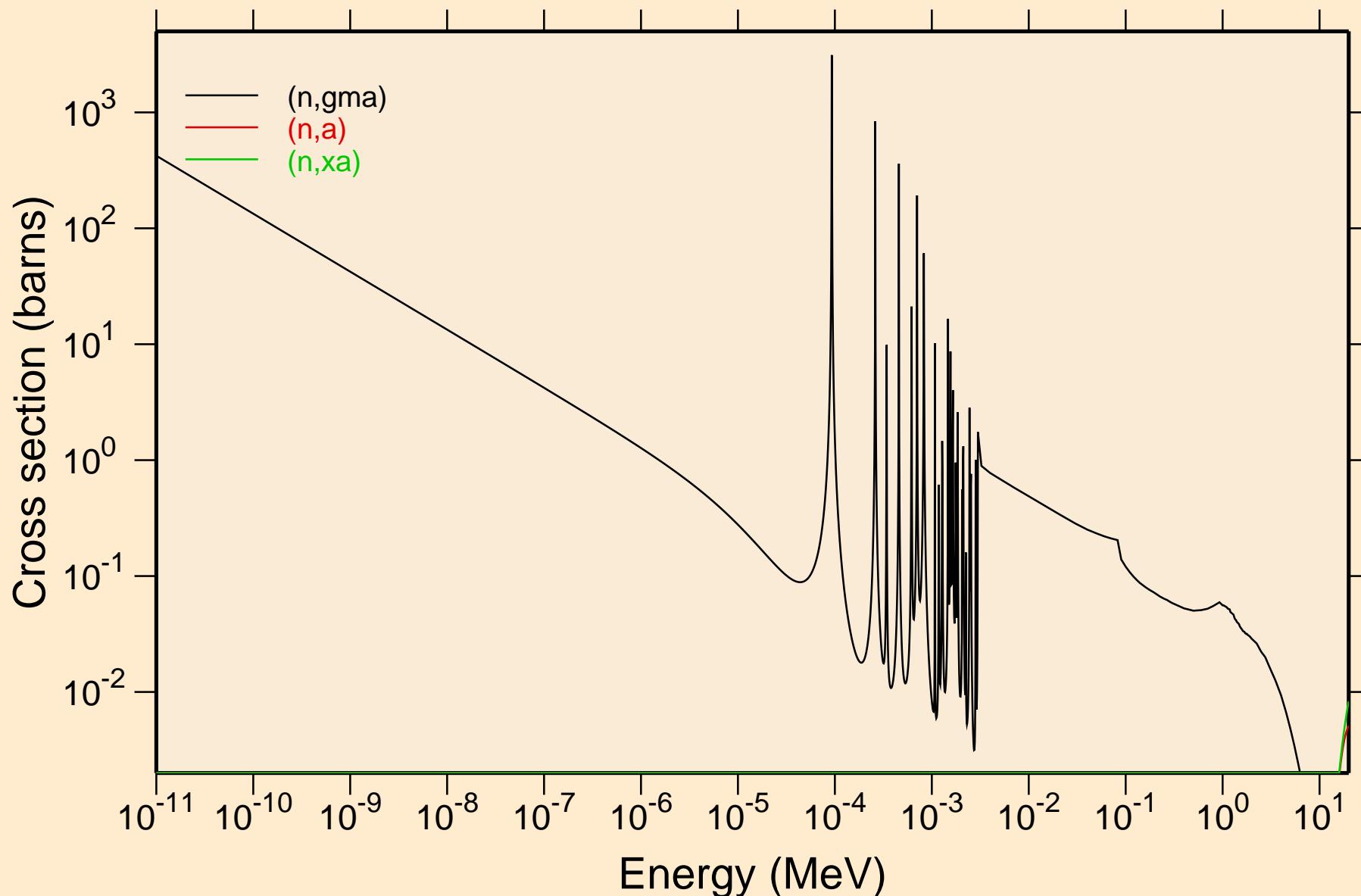


JENDL-4 SM-154  
Damage



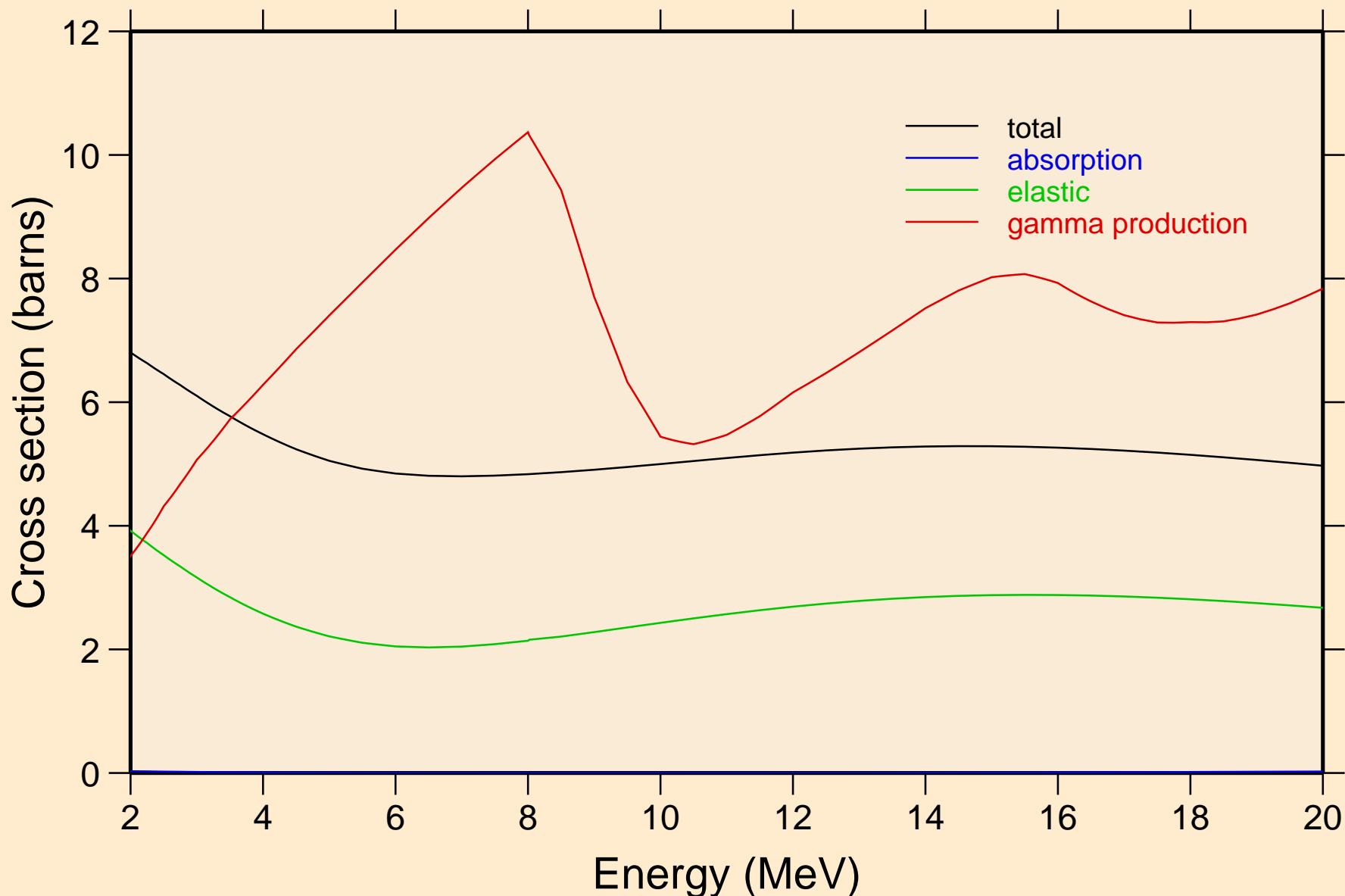
# JENDL-4 SM-154

## Non-threshold reactions

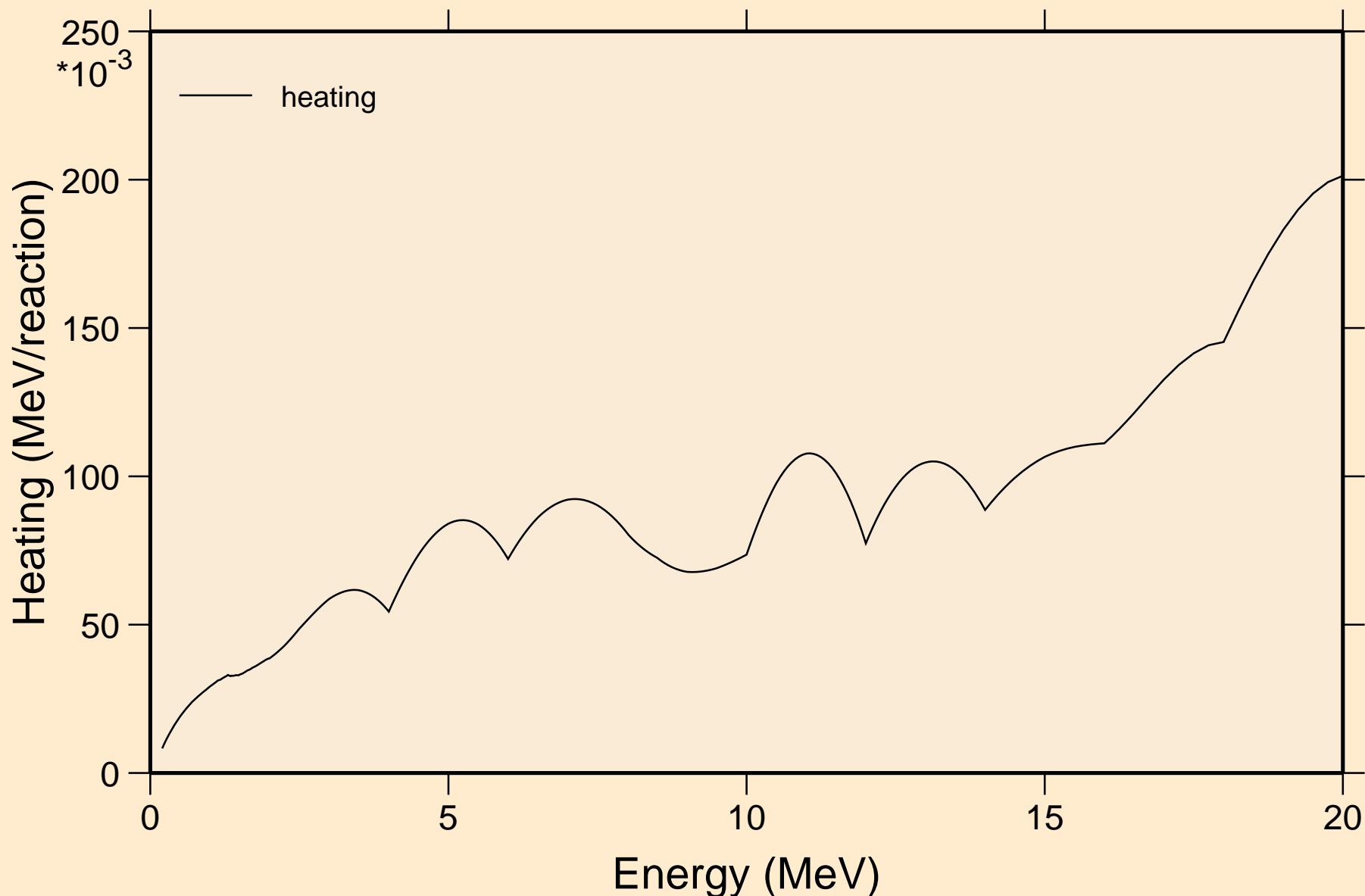


# JENDL-4 SM-154

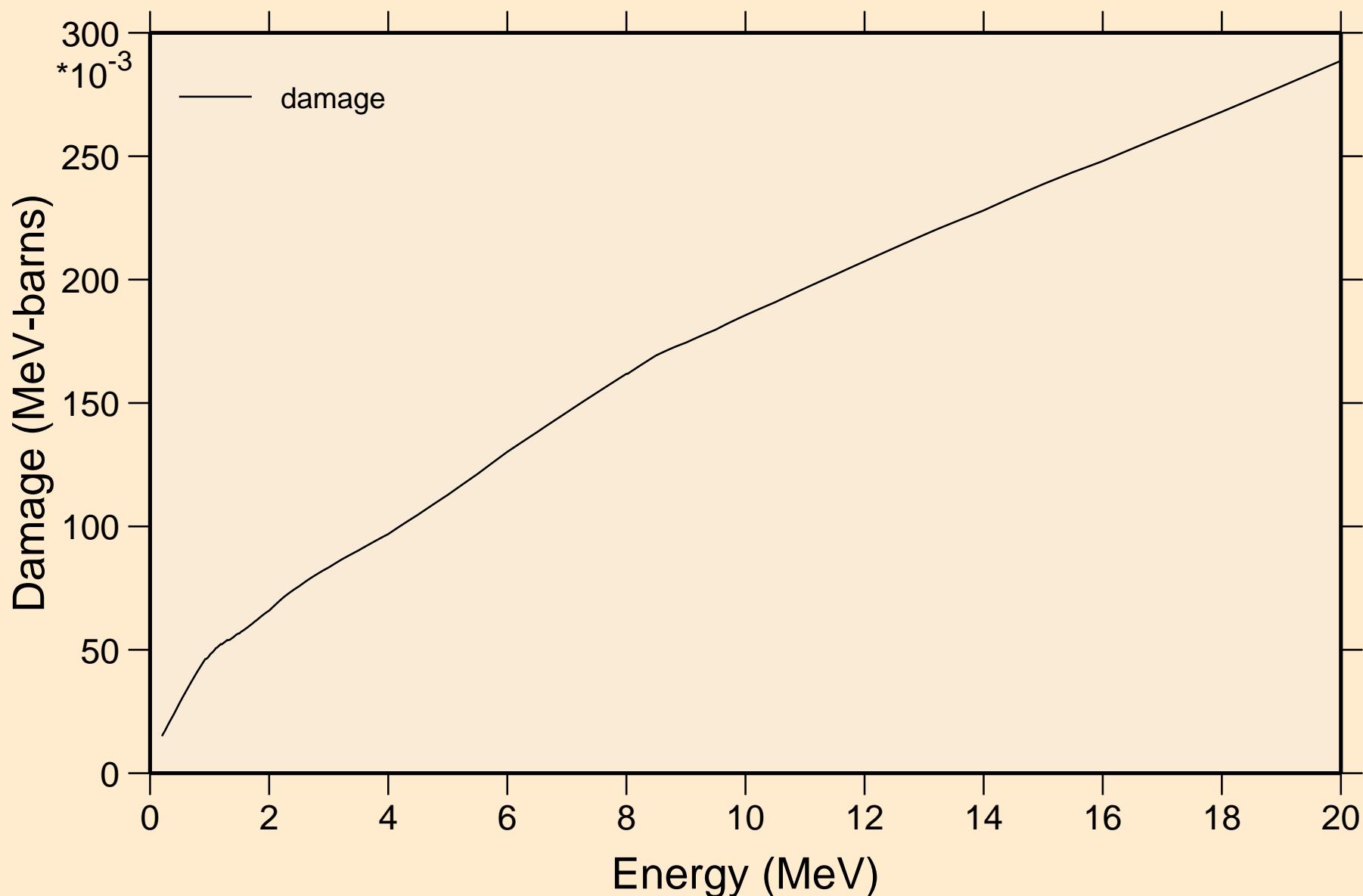
## Principal cross sections



JENDL-4 SM-154  
Heating

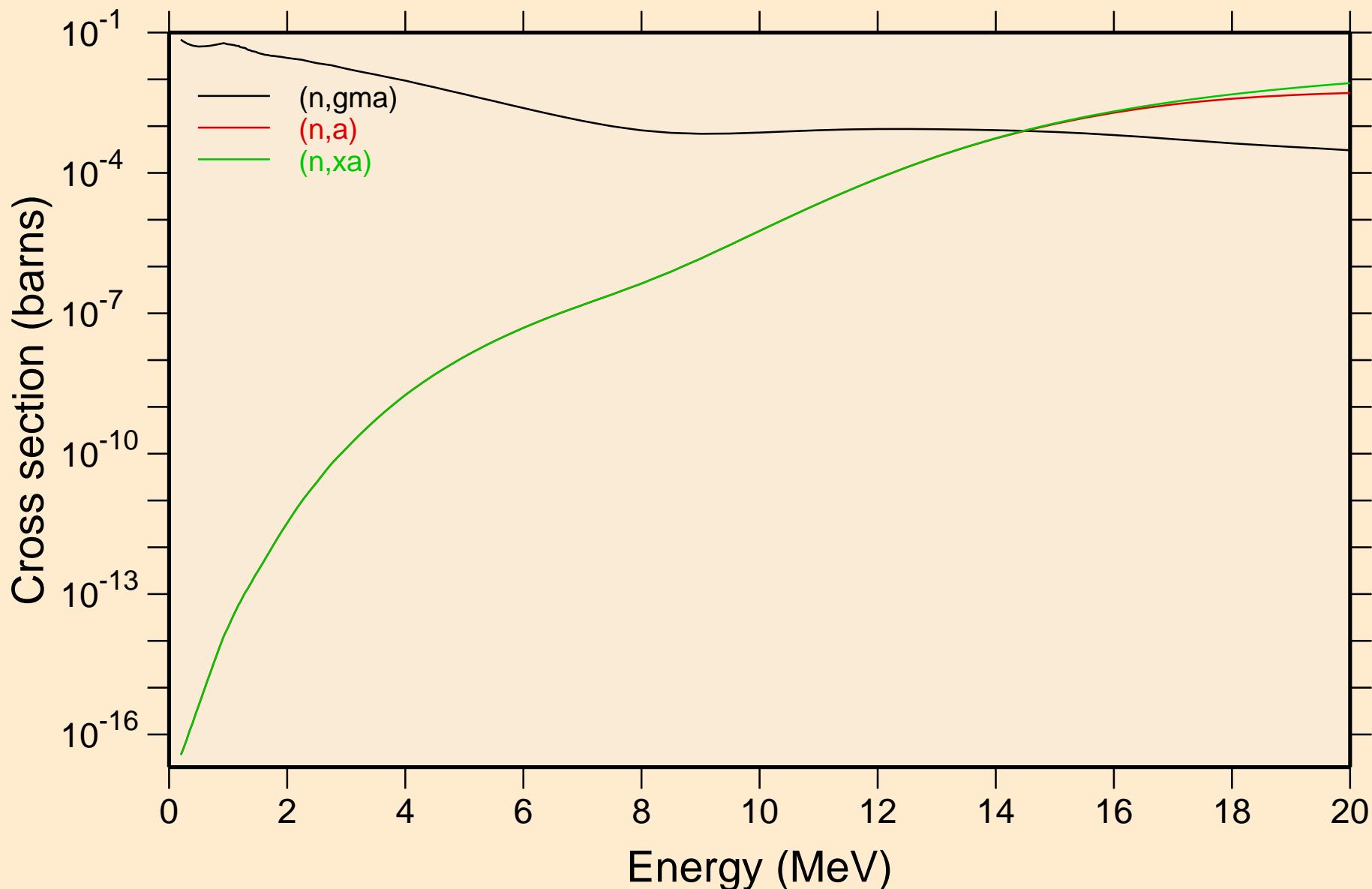


JENDL-4 SM-154  
Damage

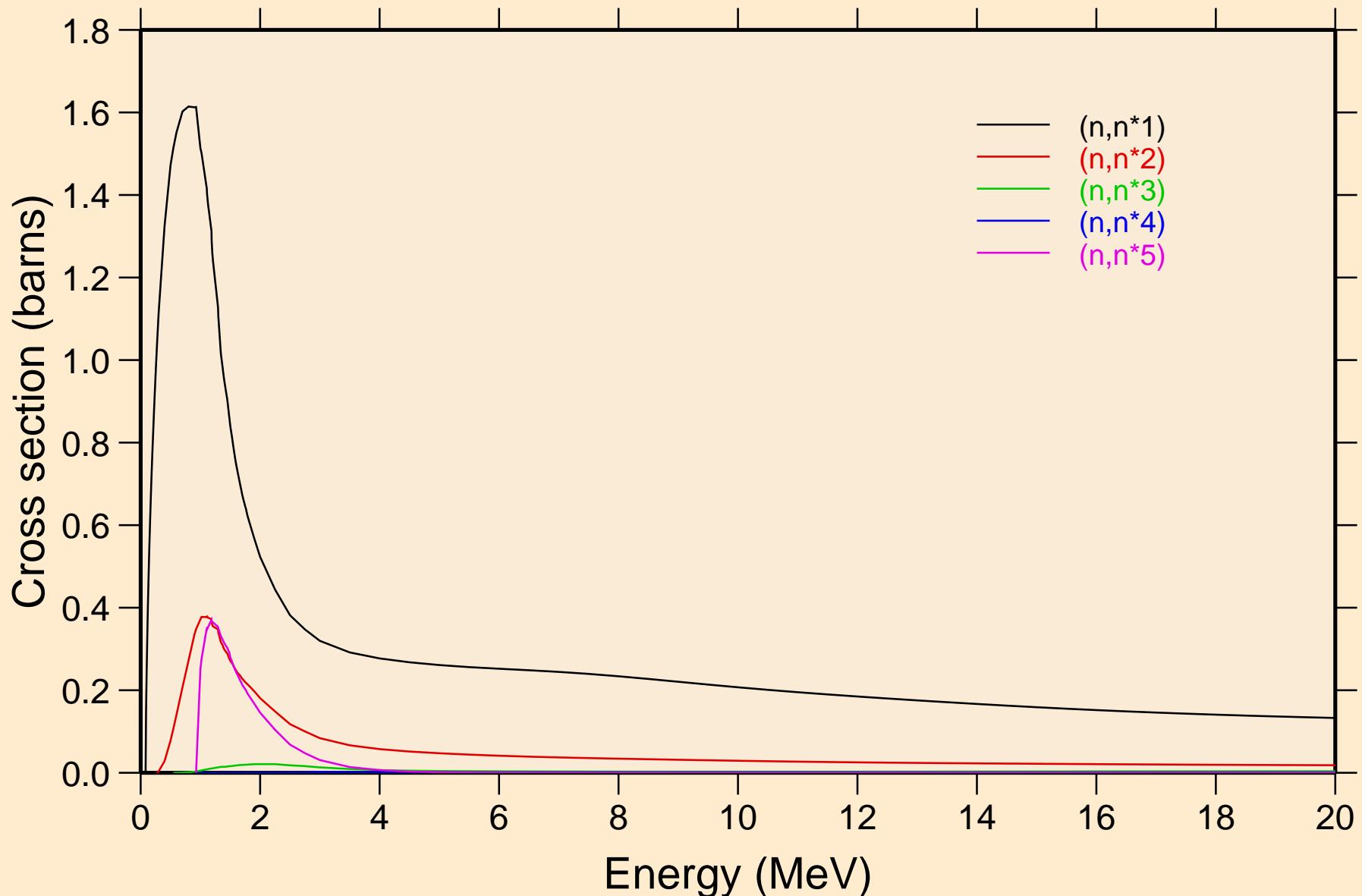


# JENDL-4 SM-154

## Non-threshold reactions

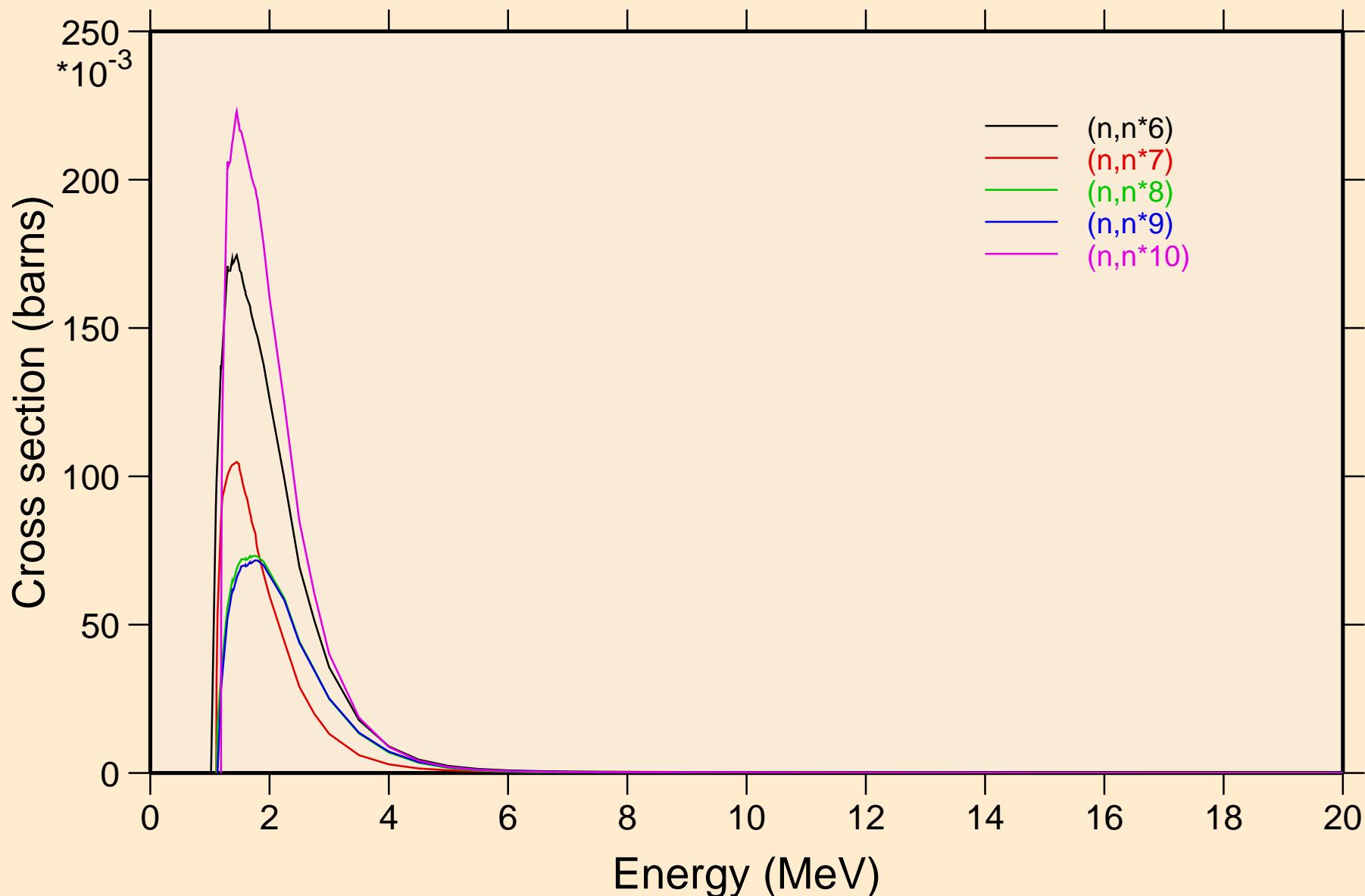


JENDL-4 SM-154  
Inelastic levels



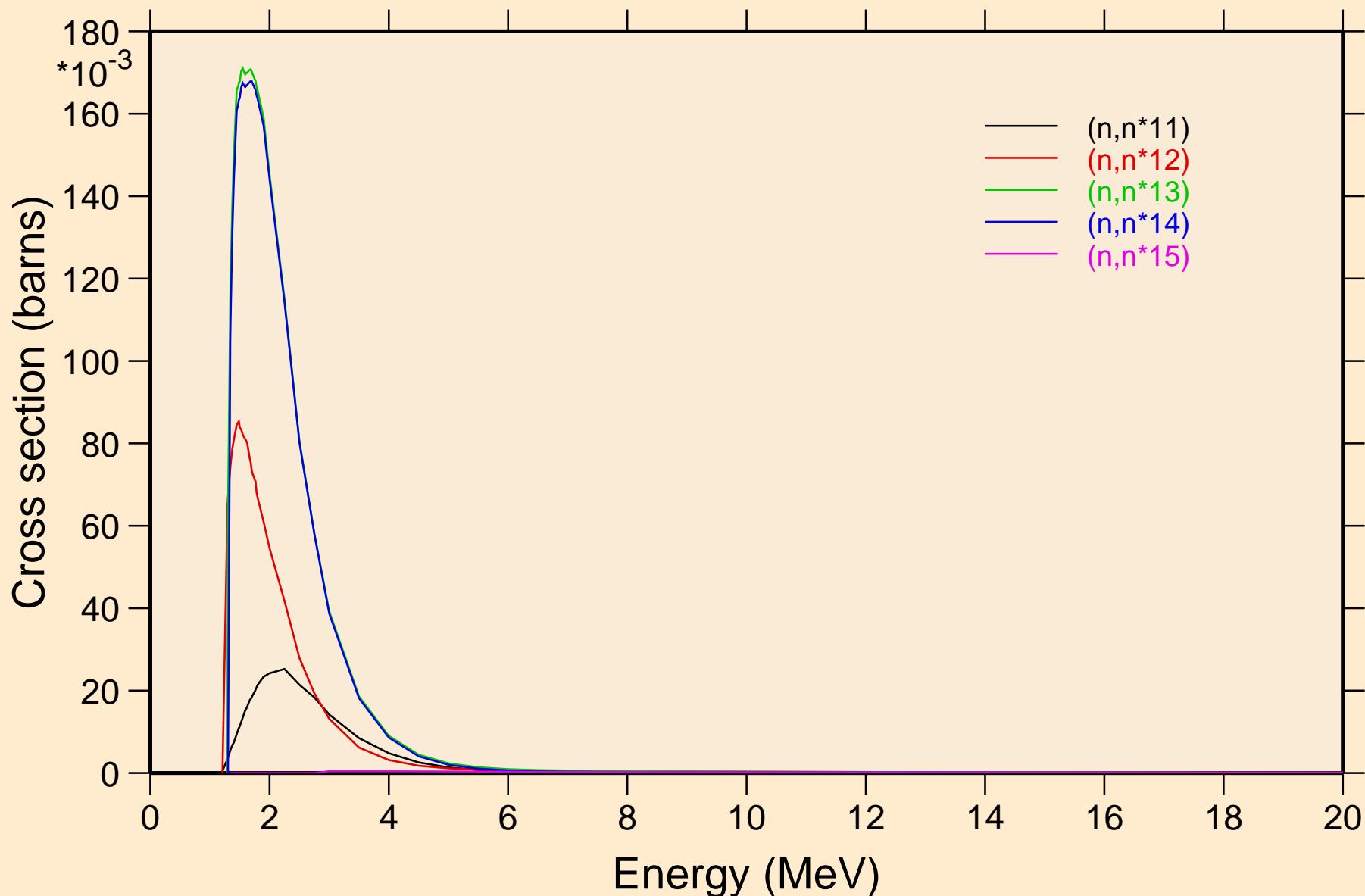
# JENDL-4 SM-154

## Inelastic levels



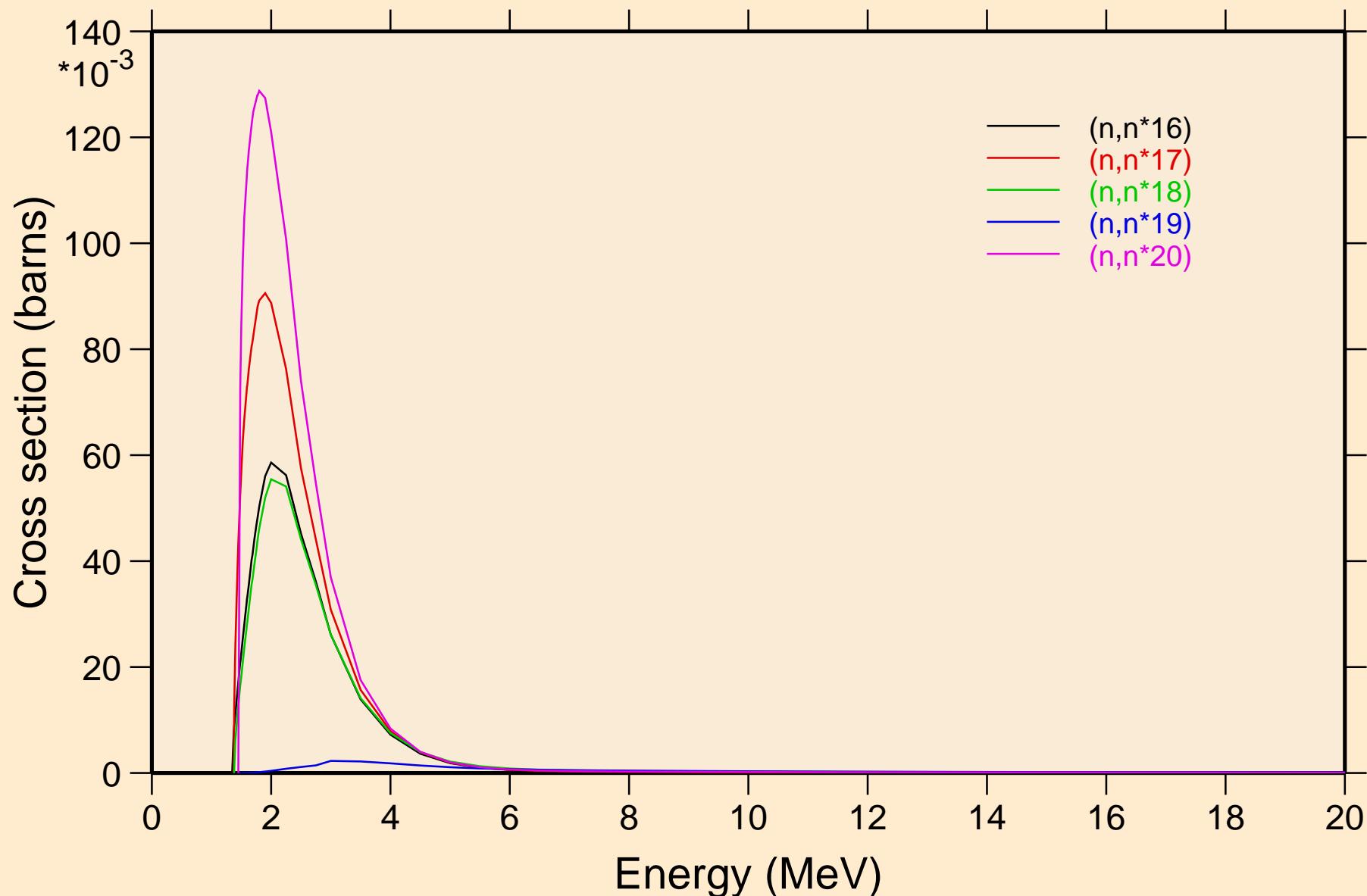
# JENDL-4 SM-154

## Inelastic levels

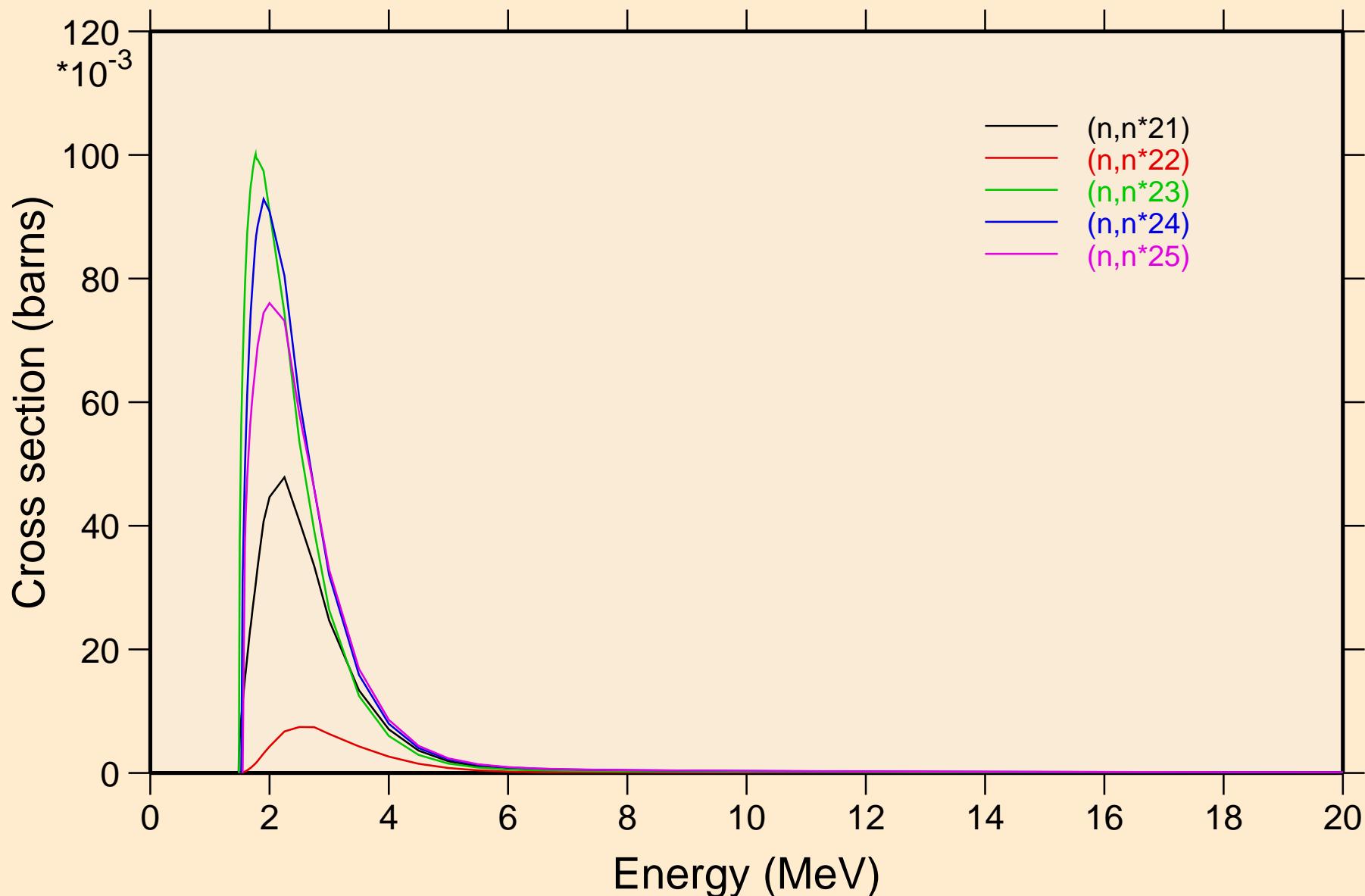


# JENDL-4 SM-154

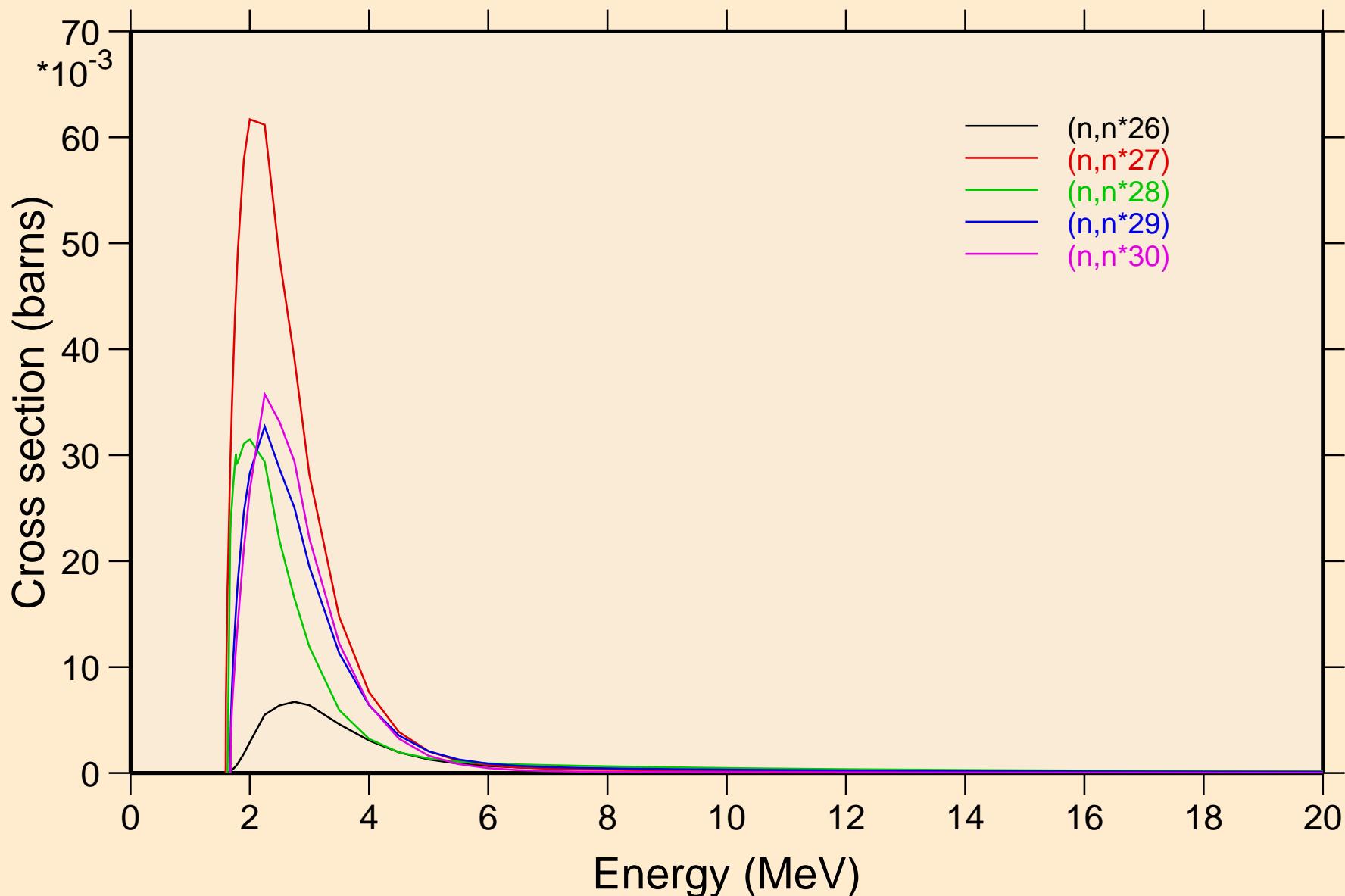
## Inelastic levels



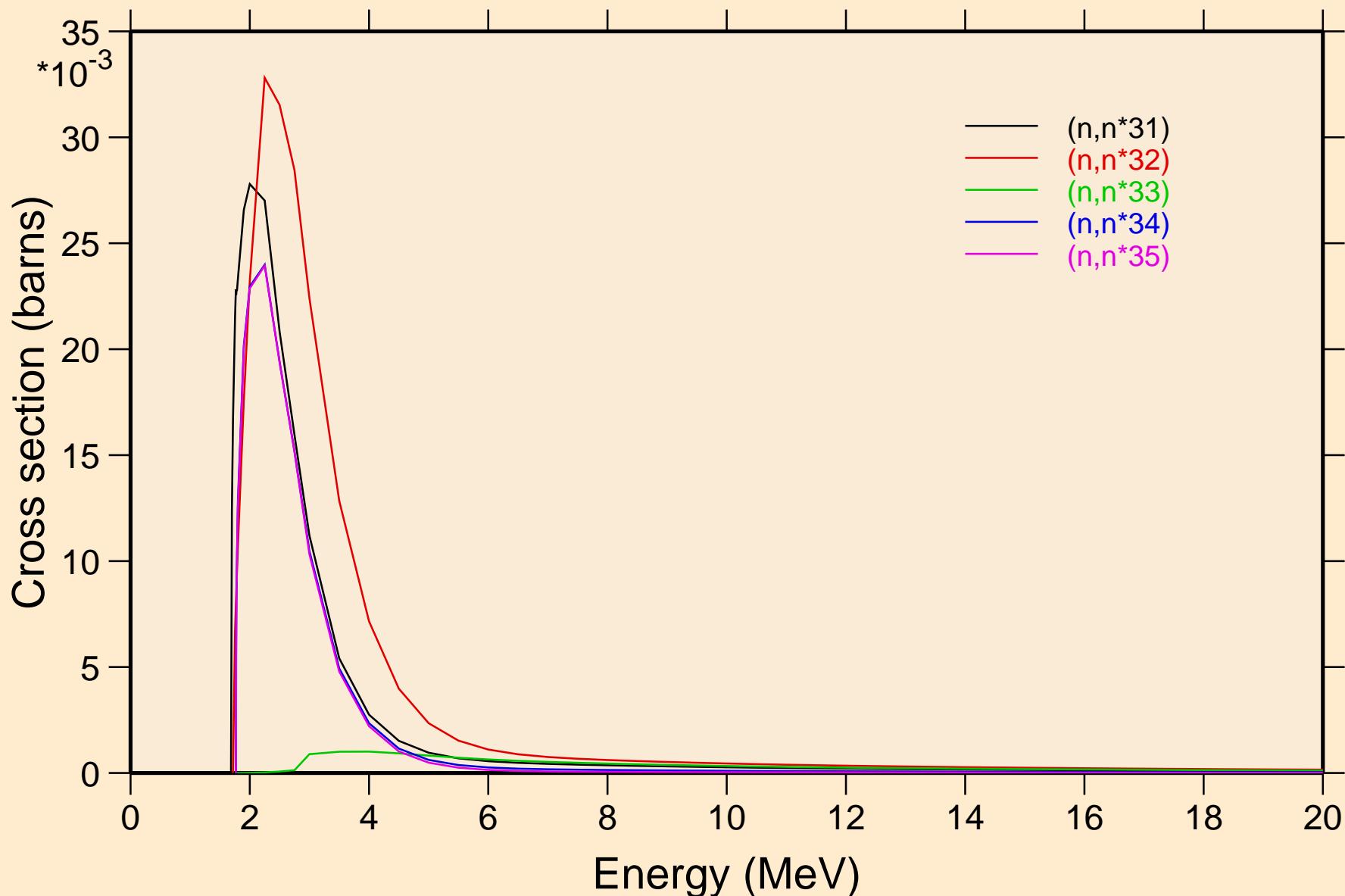
JENDL-4 SM-154  
Inelastic levels



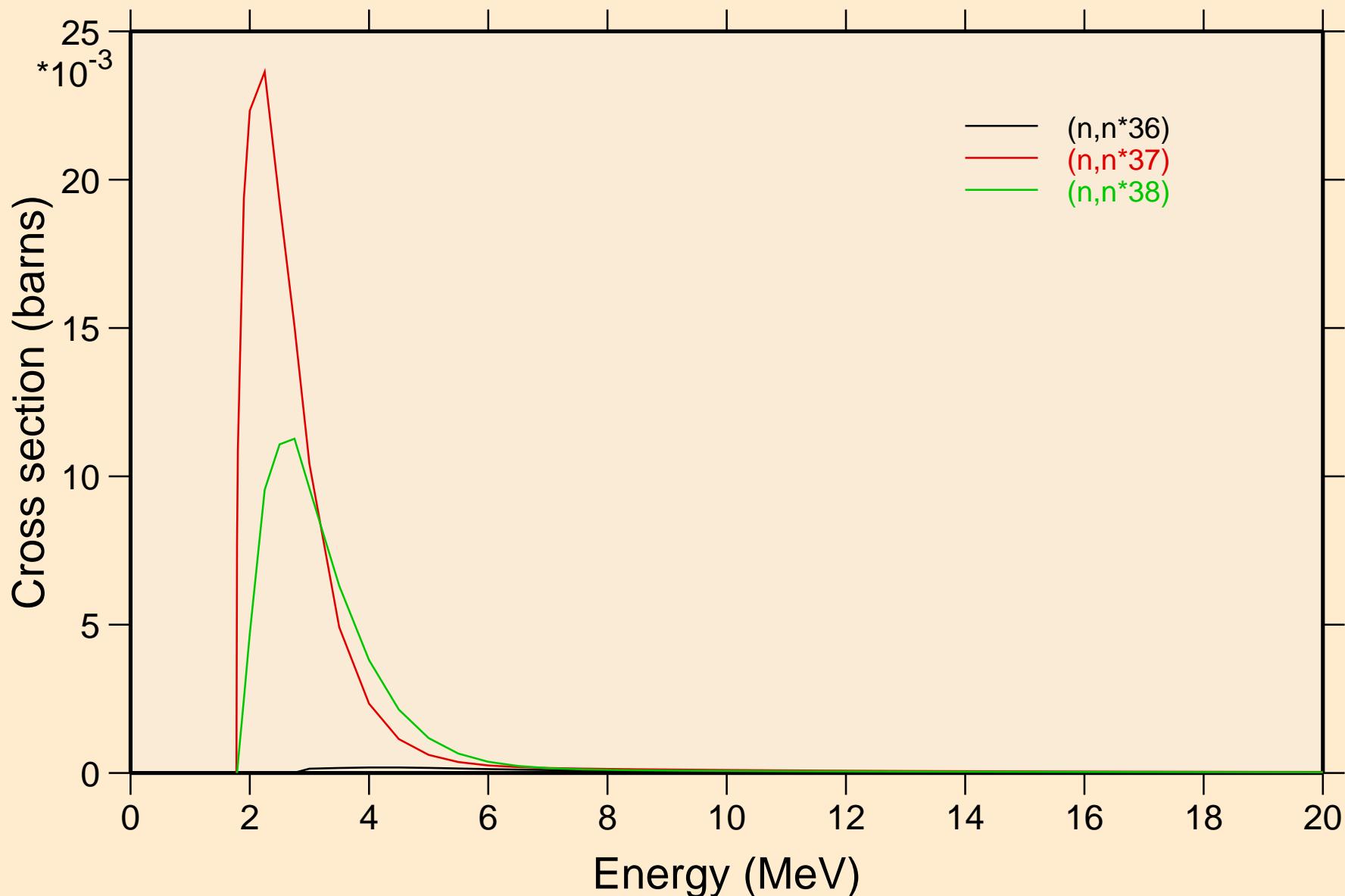
JENDL-4 SM-154  
Inelastic levels



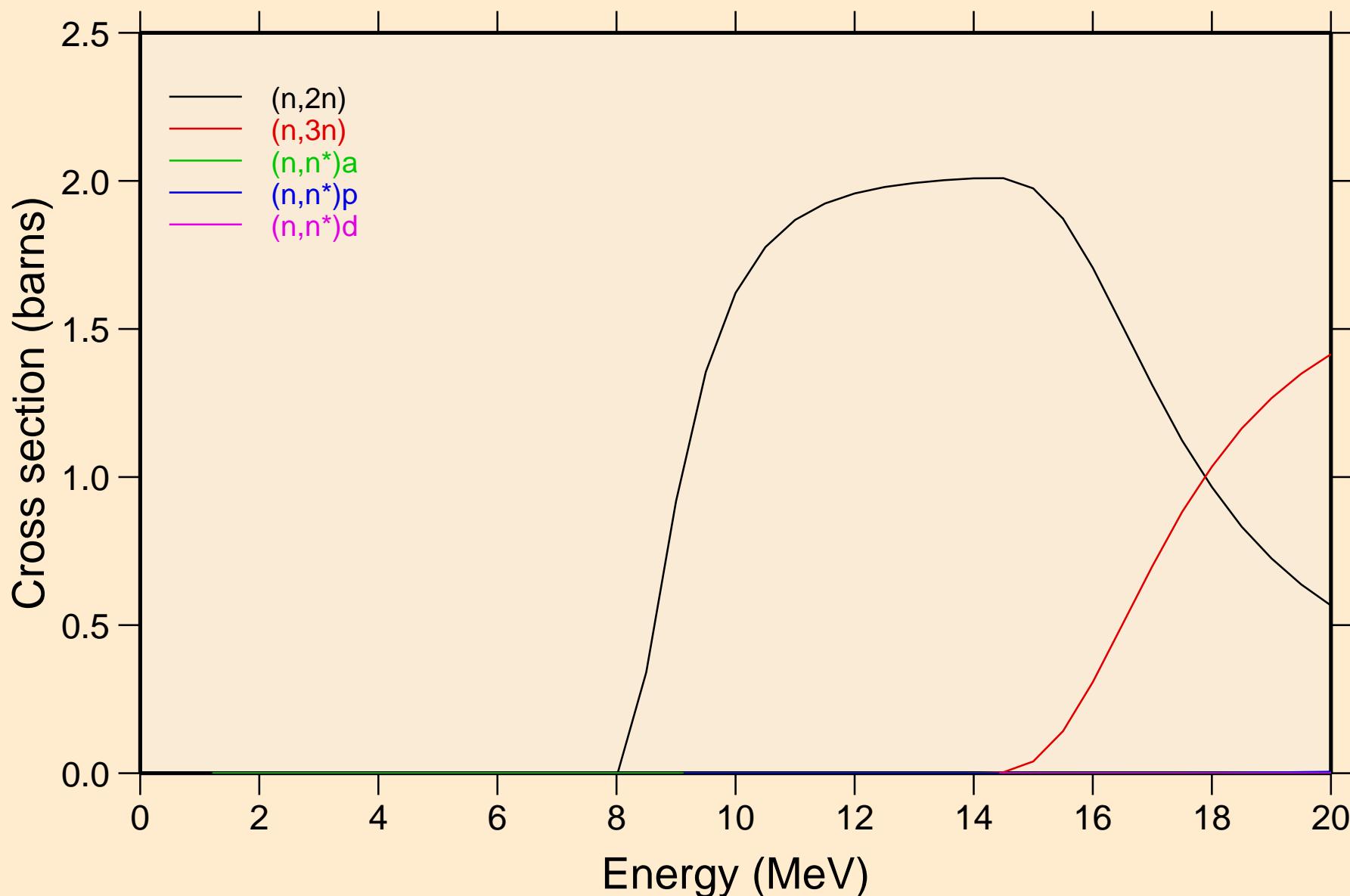
JENDL-4 SM-154  
Inelastic levels



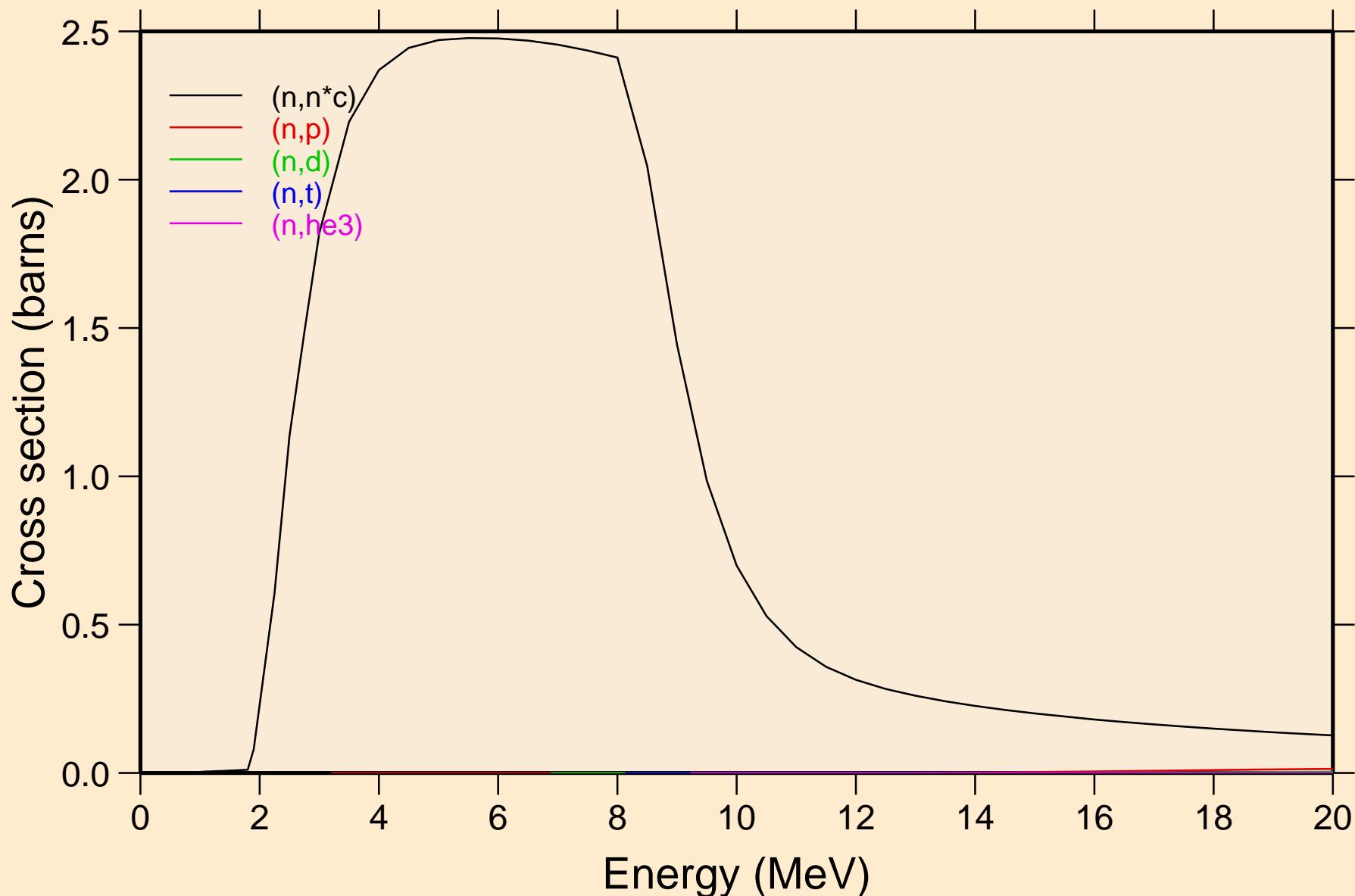
JENDL-4 SM-154  
Inelastic levels



JENDL-4 SM-154  
Threshold reactions

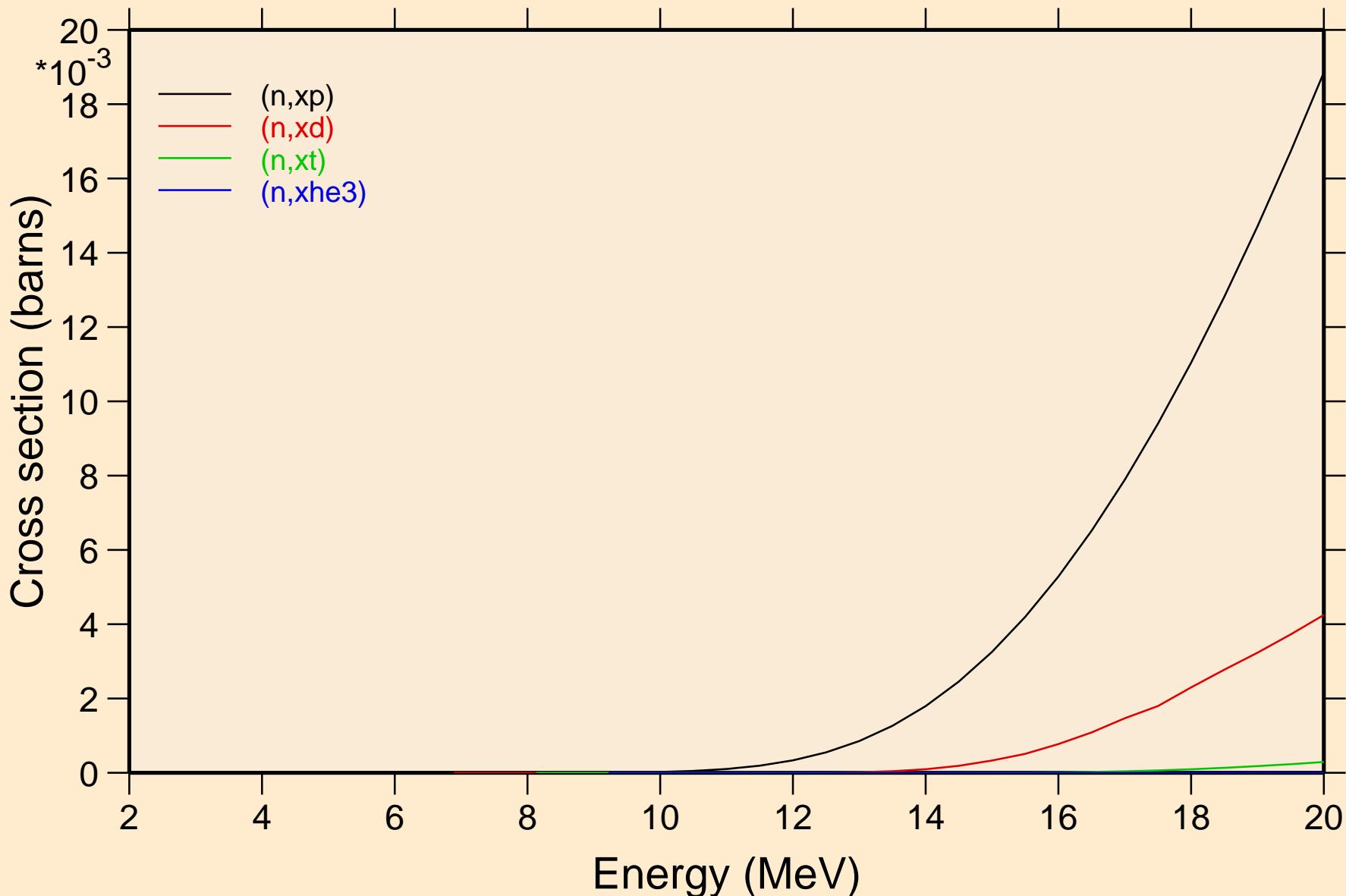


JENDL-4 SM-154  
Threshold reactions

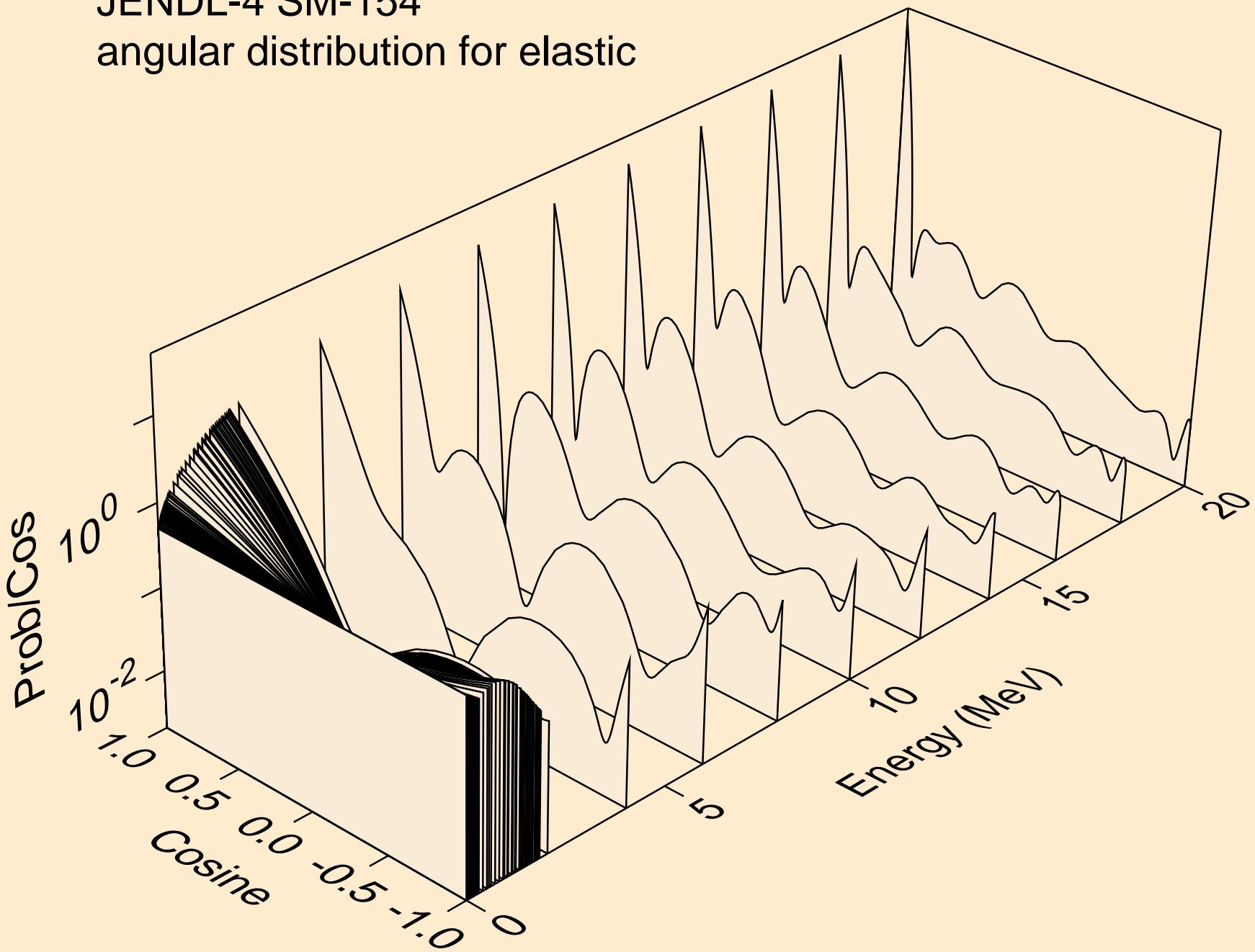


# JENDL-4 SM-154

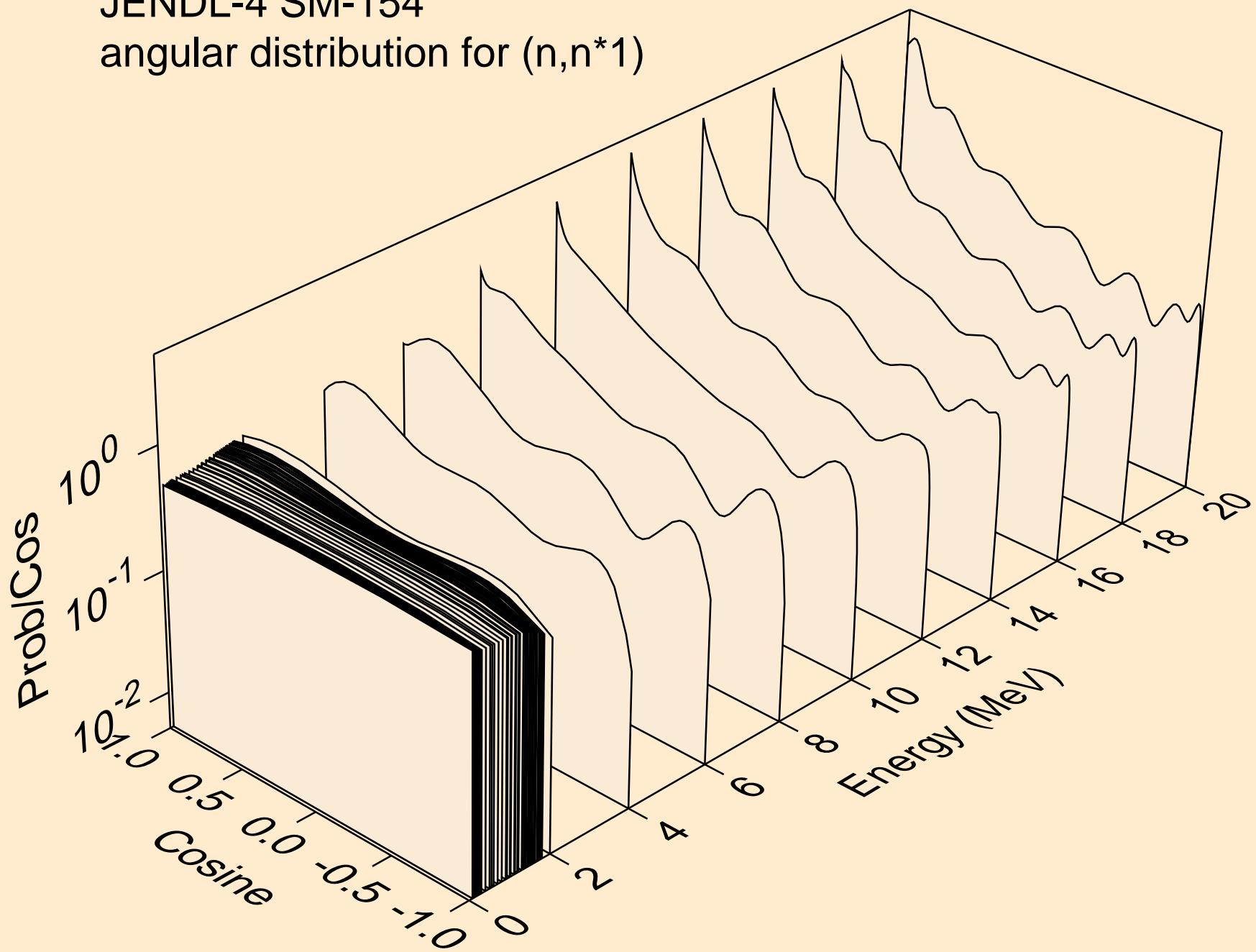
## Threshold reactions



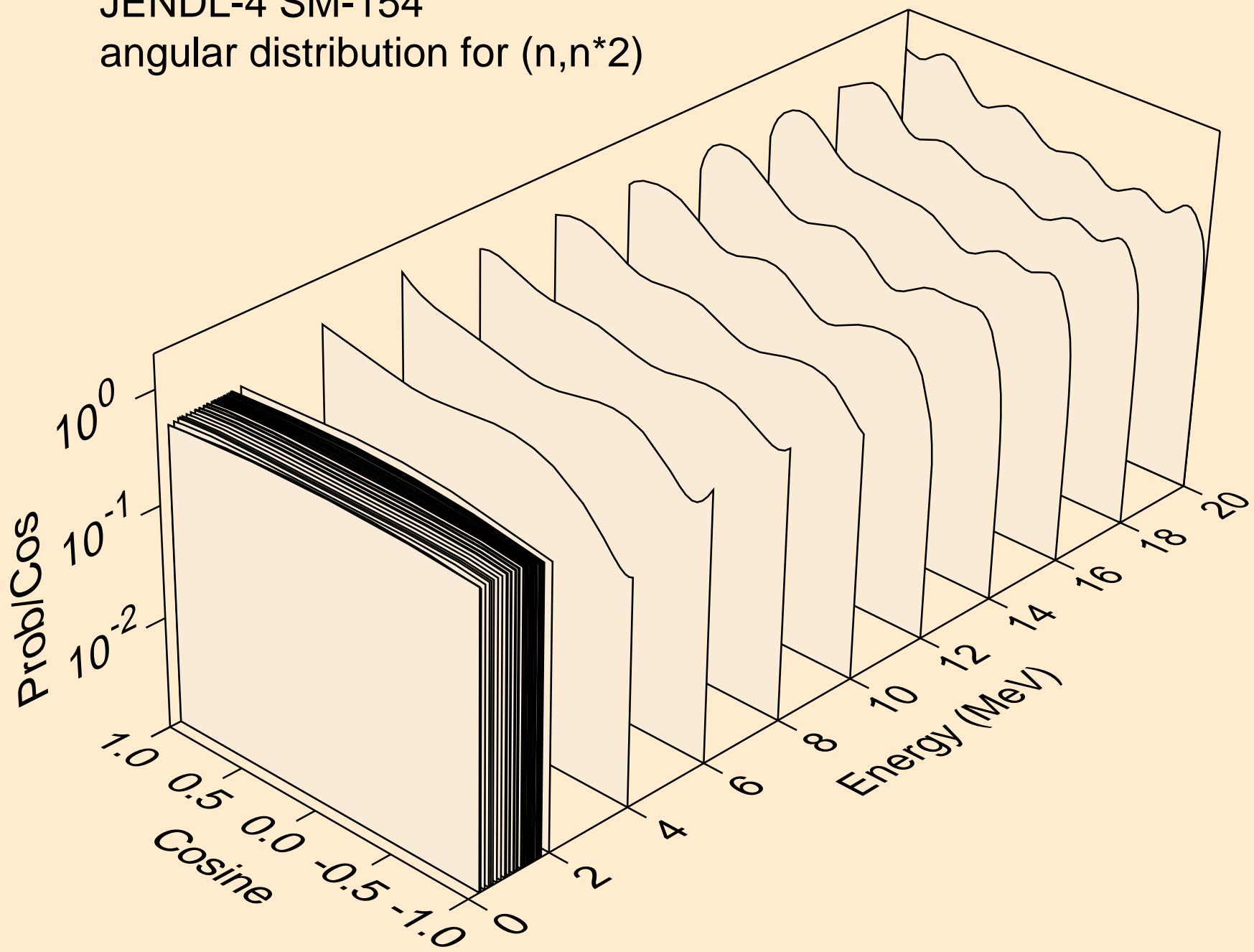
JENDL-4 SM-154  
angular distribution for elastic



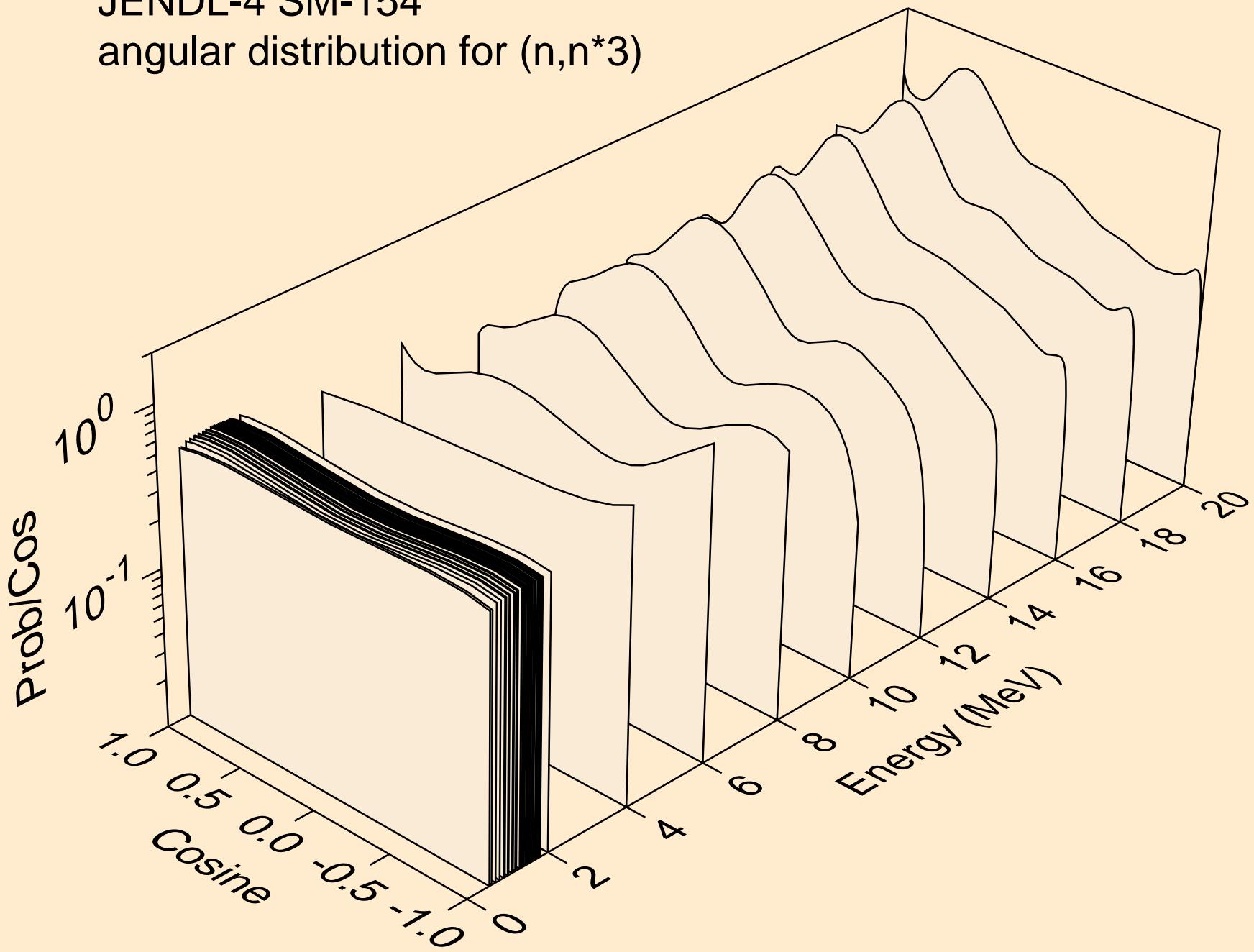
JENDL-4 SM-154  
angular distribution for  $(n,n^*)$



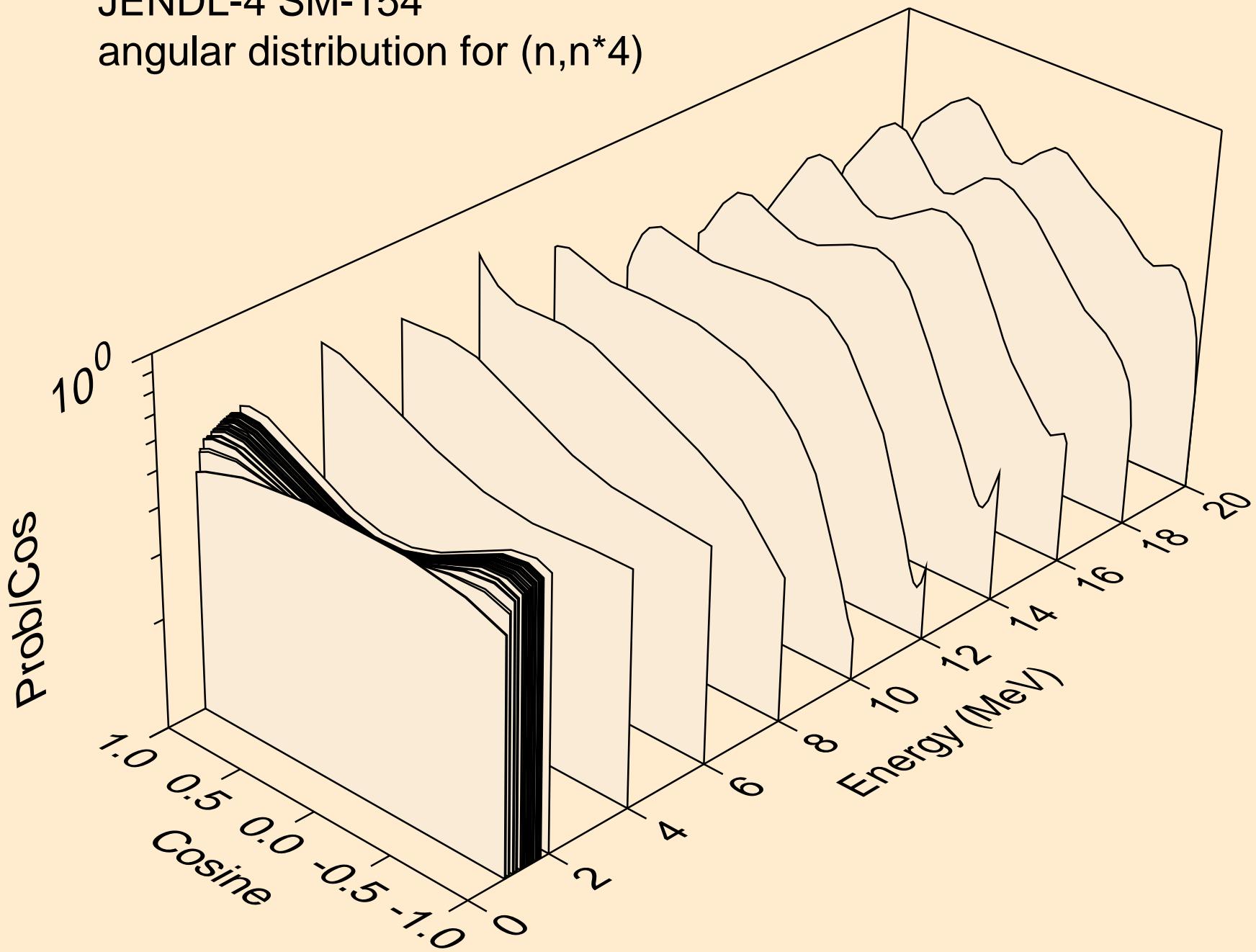
JENDL-4 SM-154  
angular distribution for  $(n,n^*)$



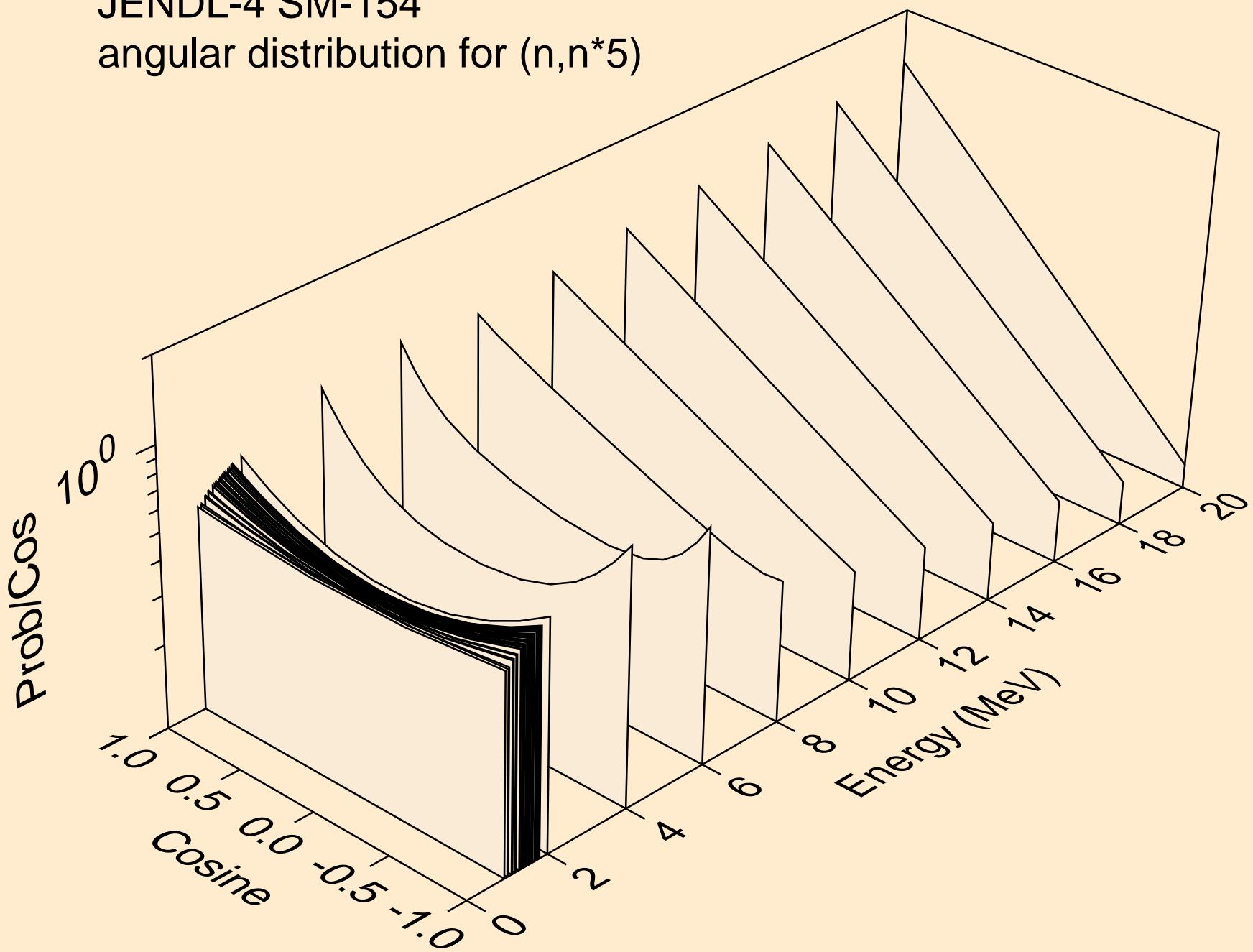
JENDL-4 SM-154  
angular distribution for  $(n,n^*)^3$



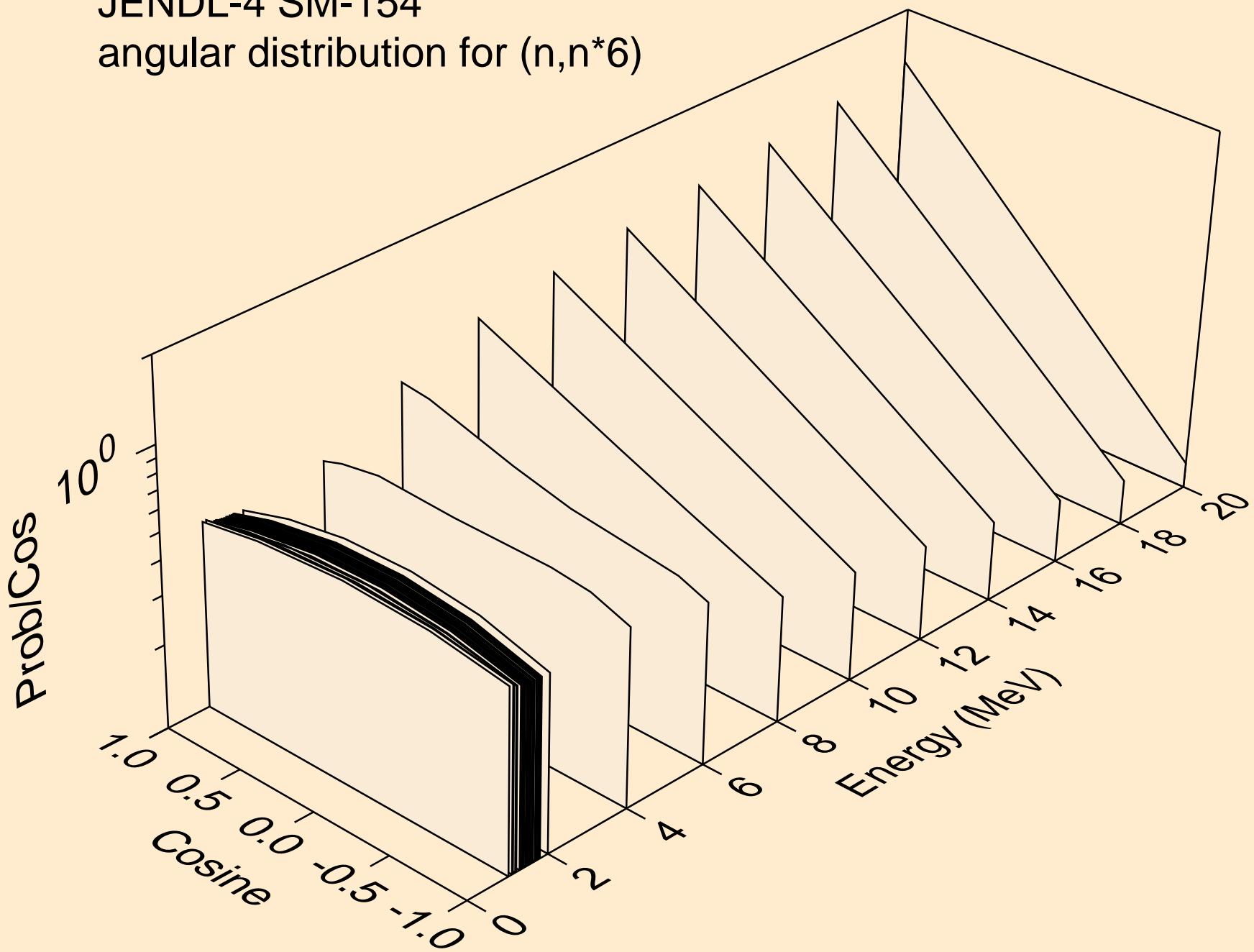
JENDL-4 SM-154  
angular distribution for  $(n,n^*4)$



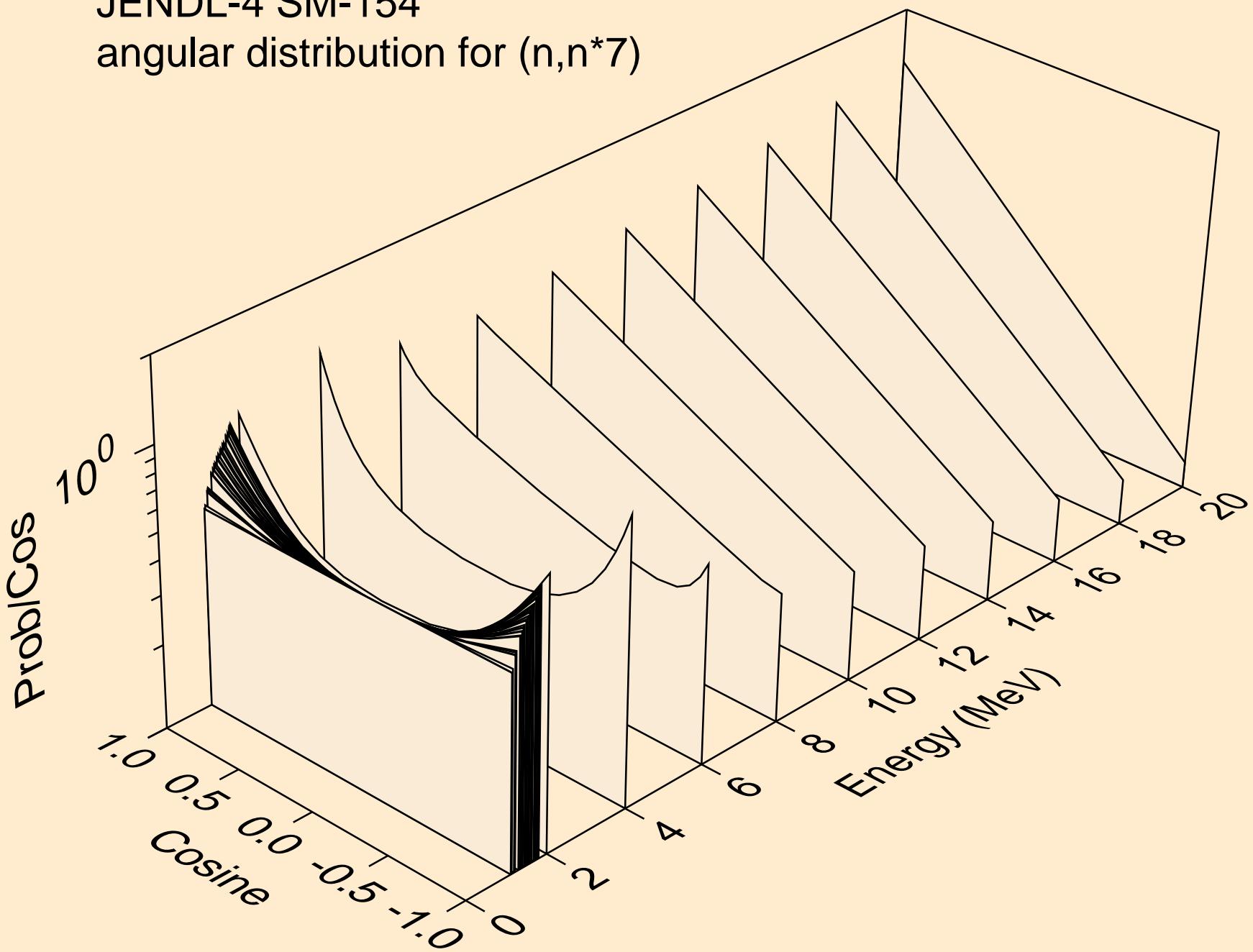
JENDL-4 SM-154  
angular distribution for  $(n,n^*5)$



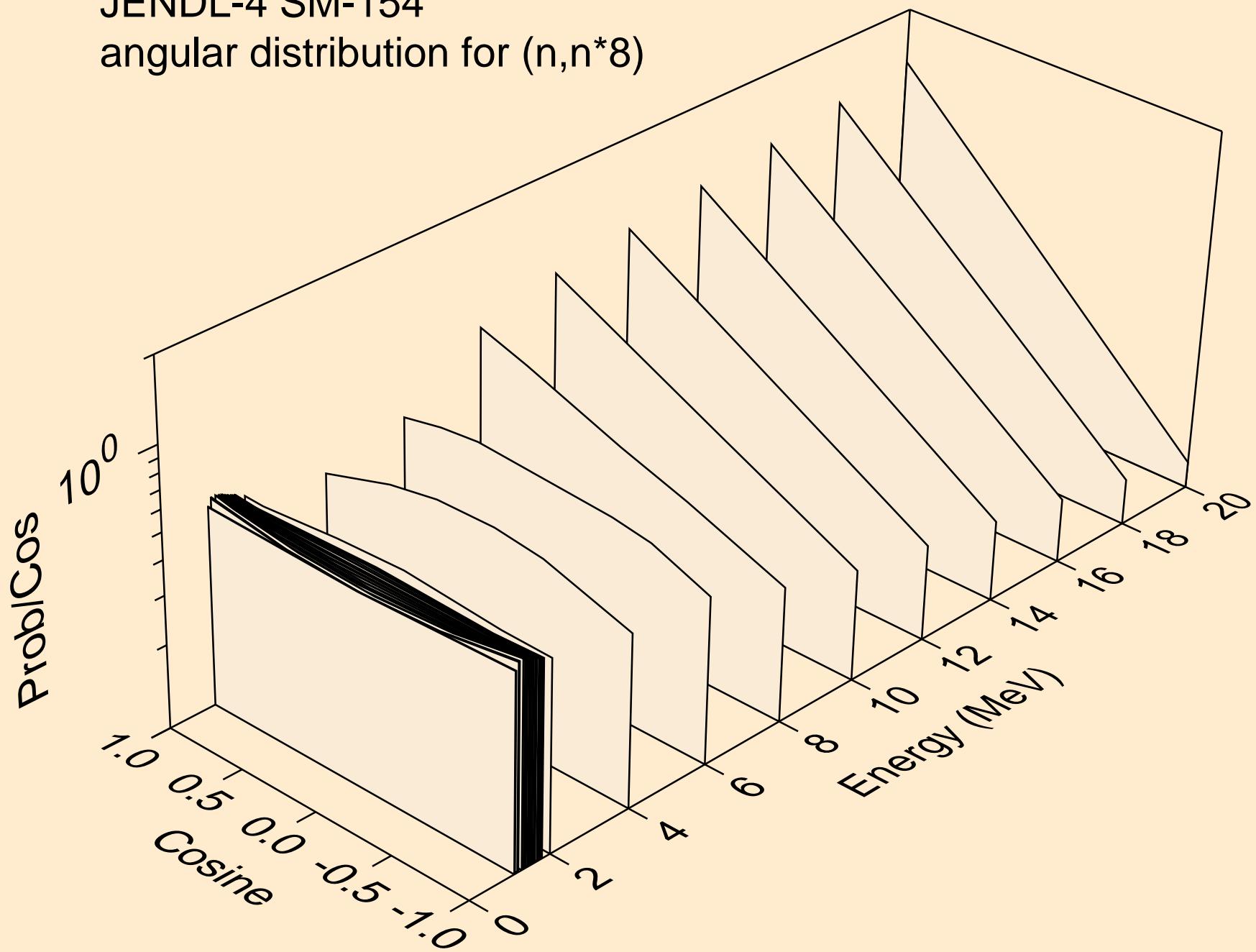
JENDL-4 SM-154  
angular distribution for  $(n,n^*6)$



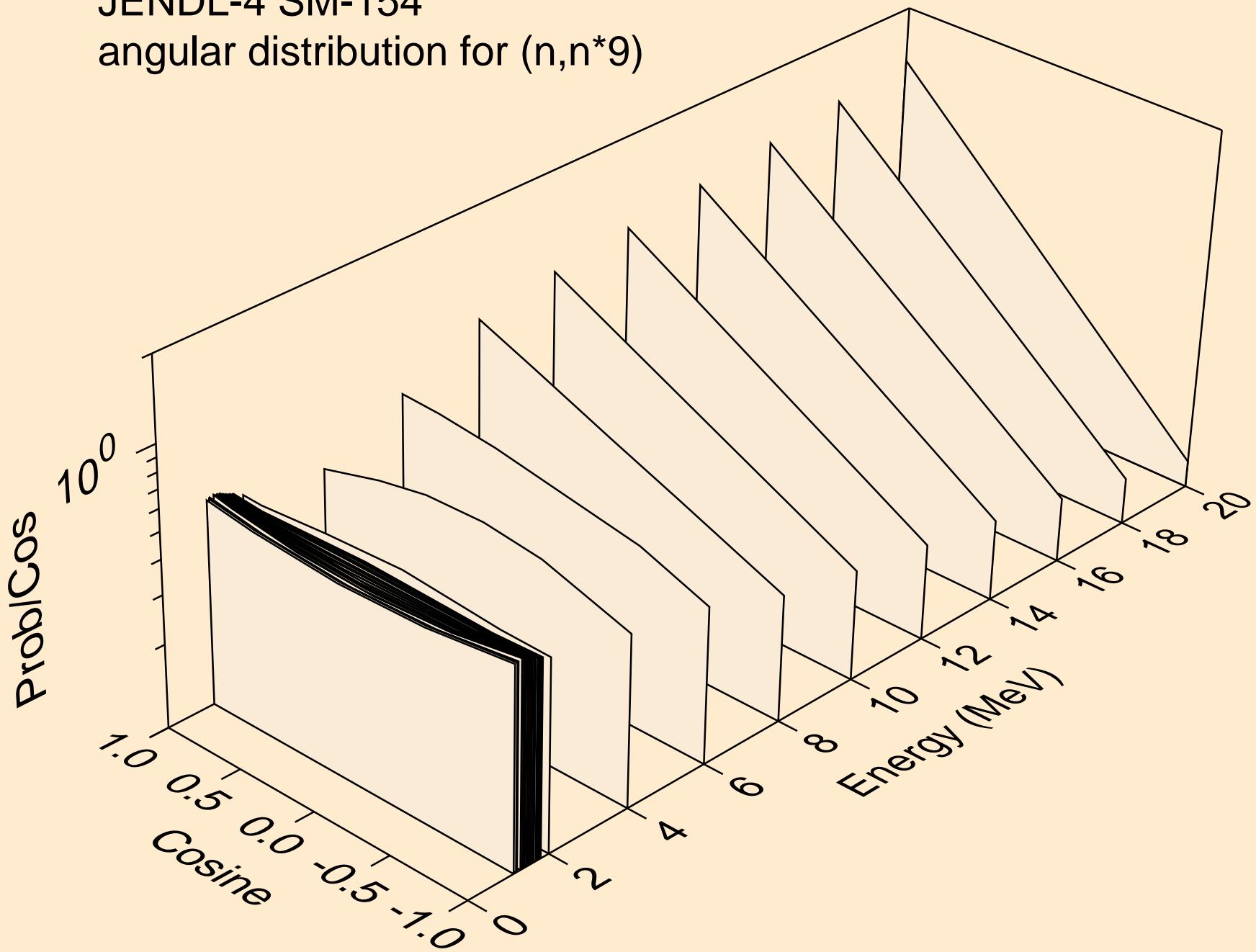
JENDL-4 SM-154  
angular distribution for  $(n,n^*7)$



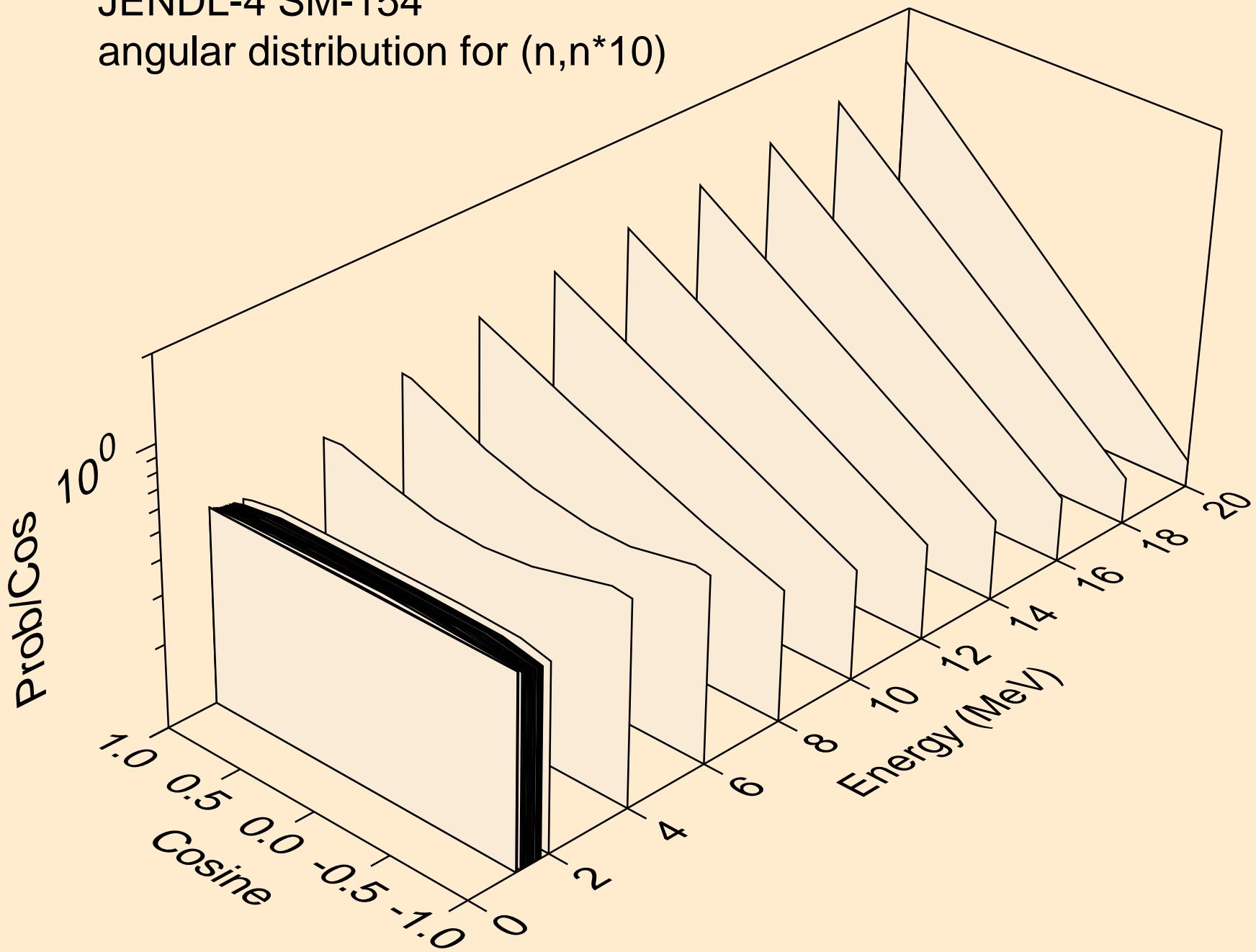
JENDL-4 SM-154  
angular distribution for  $(n,n^*8)$



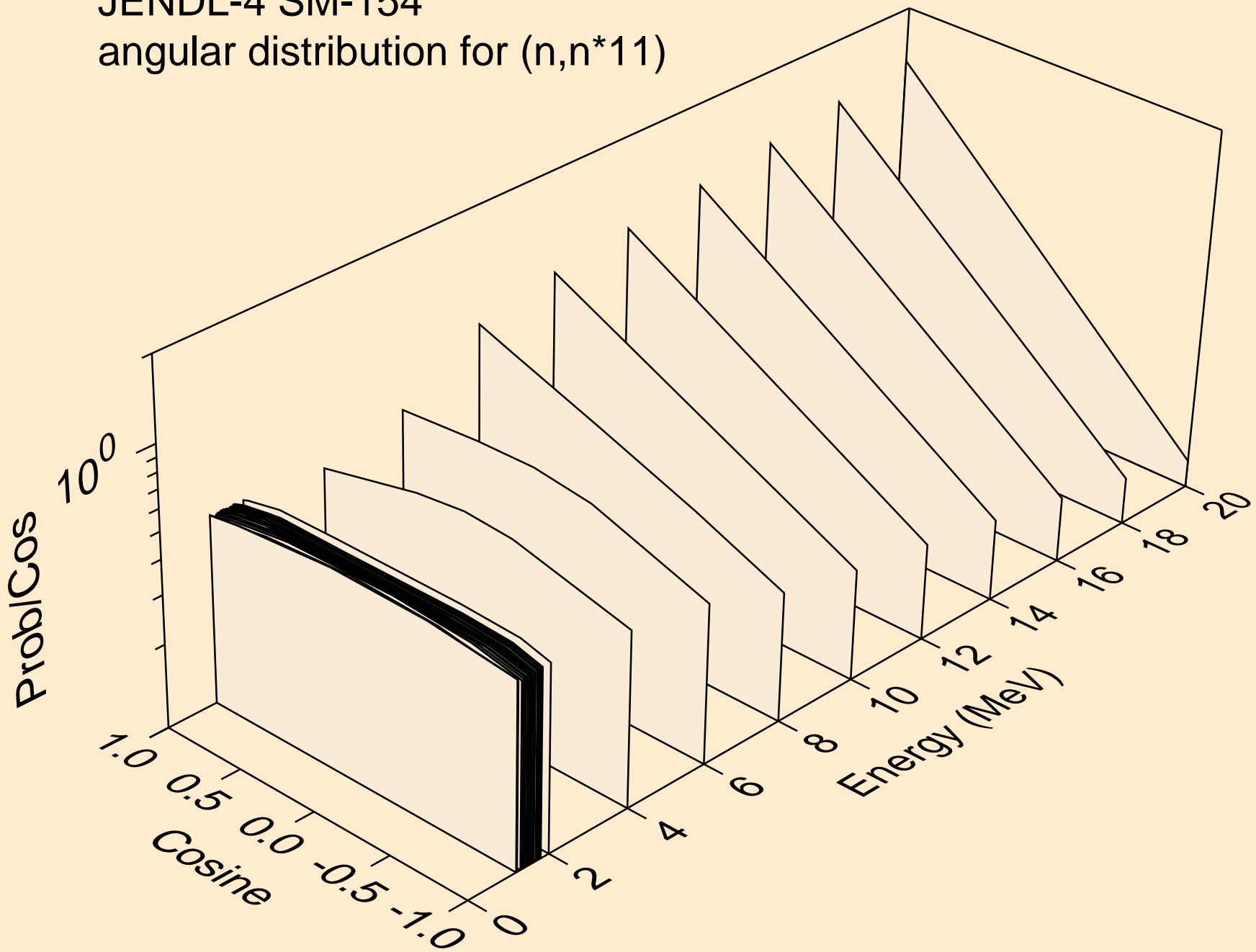
JENDL-4 SM-154  
angular distribution for  $(n,n^*9)$



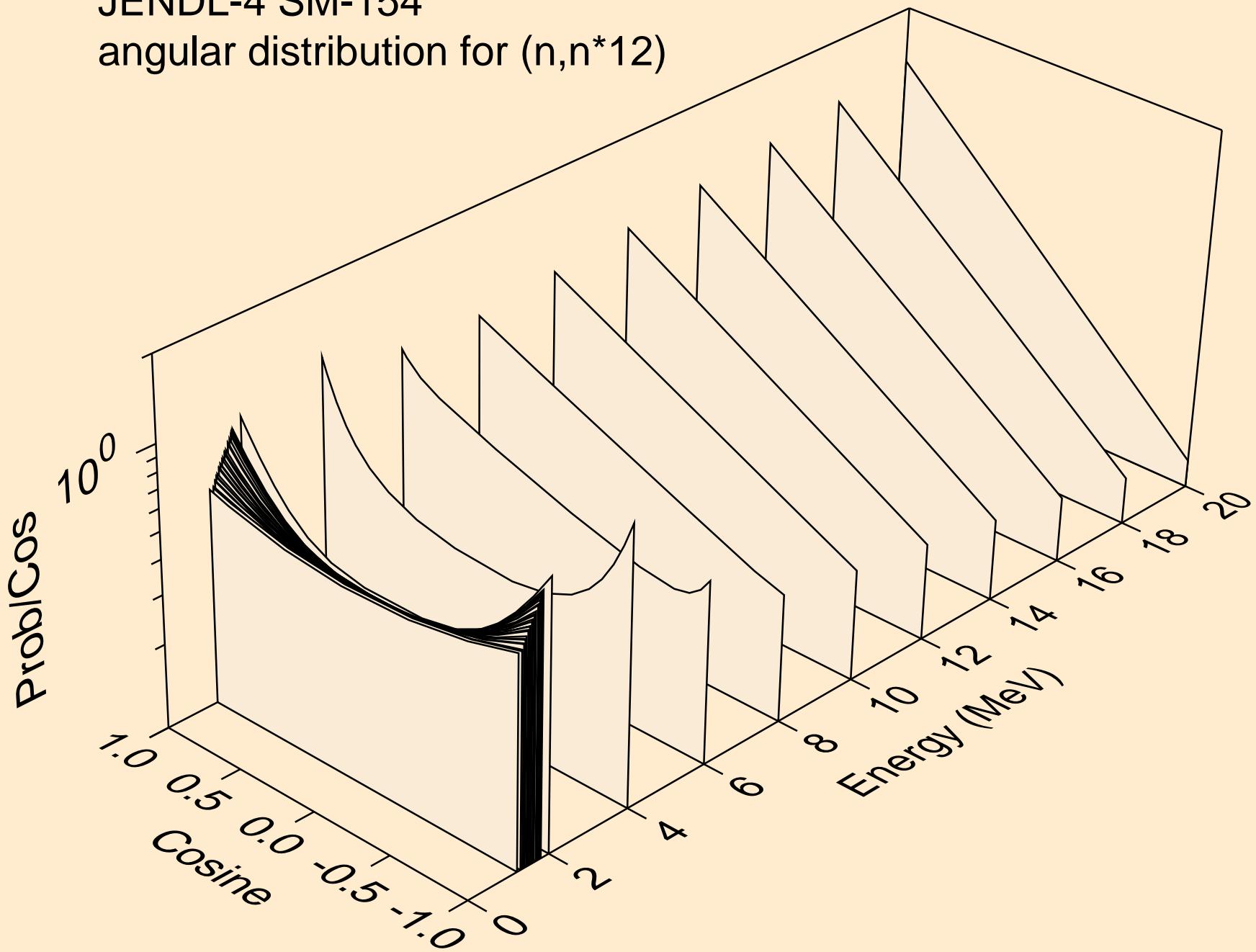
JENDL-4 SM-154  
angular distribution for (n,n\*10)



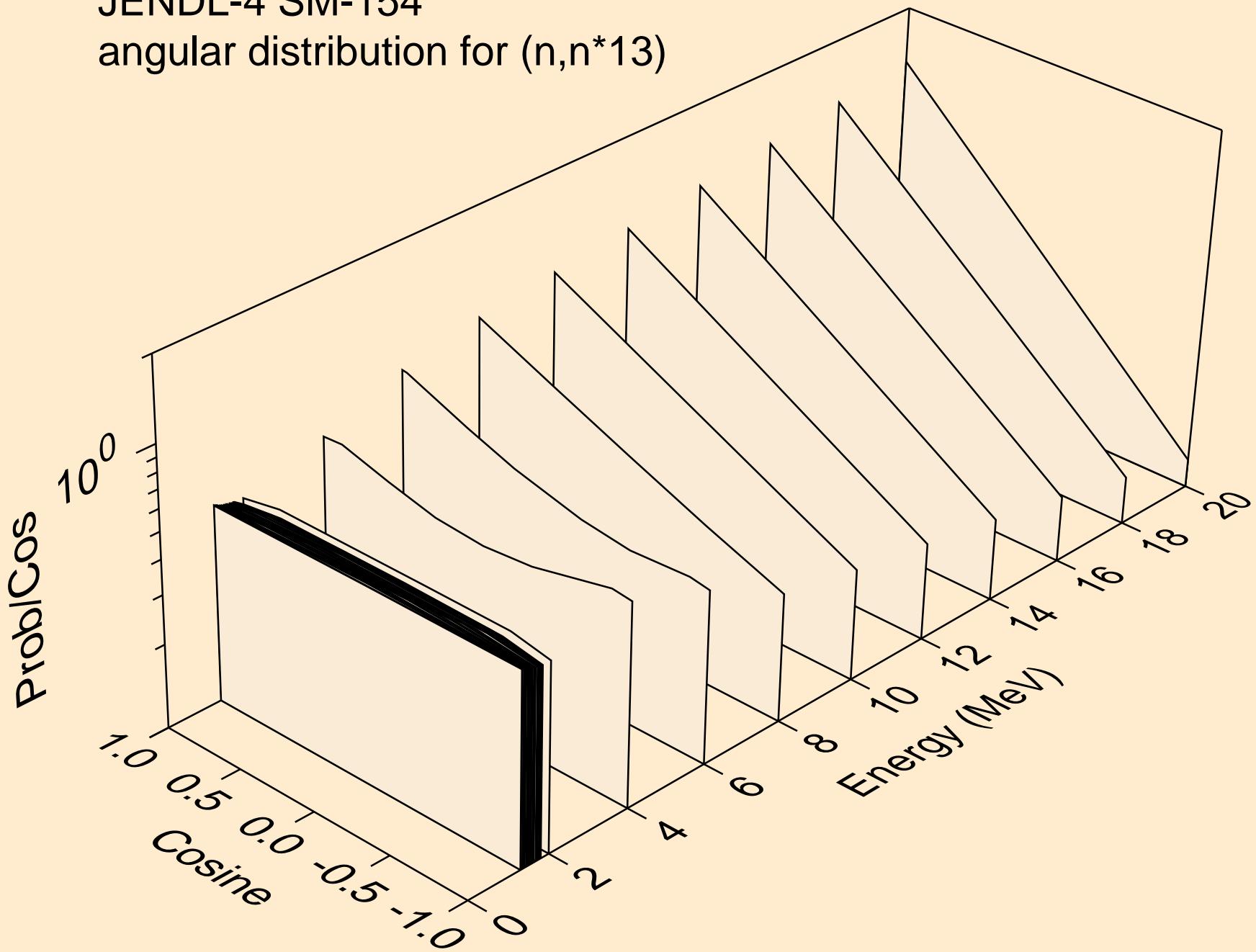
JENDL-4 SM-154  
angular distribution for (n,n\*11)



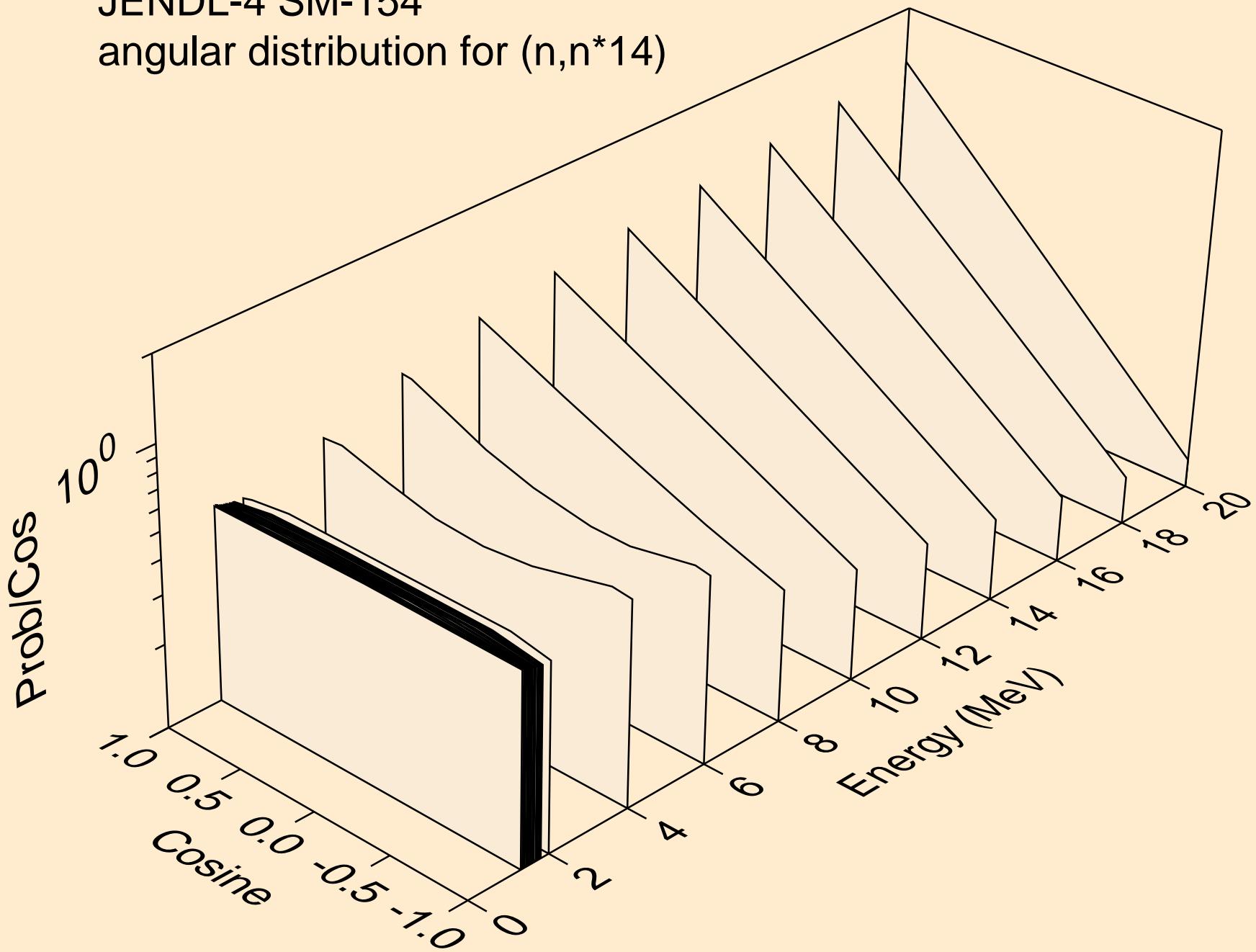
JENDL-4 SM-154  
angular distribution for (n,n\*12)



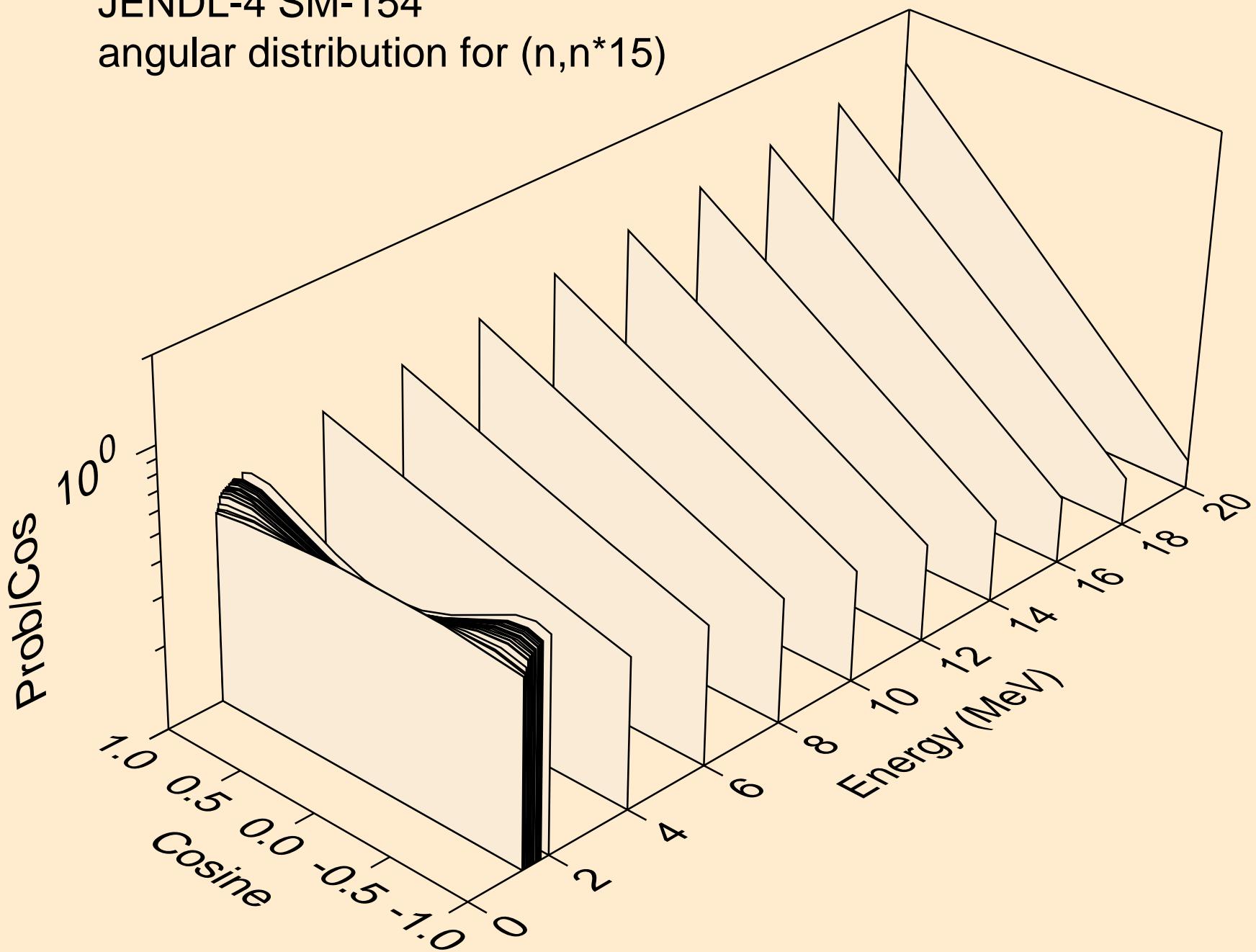
JENDL-4 SM-154  
angular distribution for (n,n\*13)



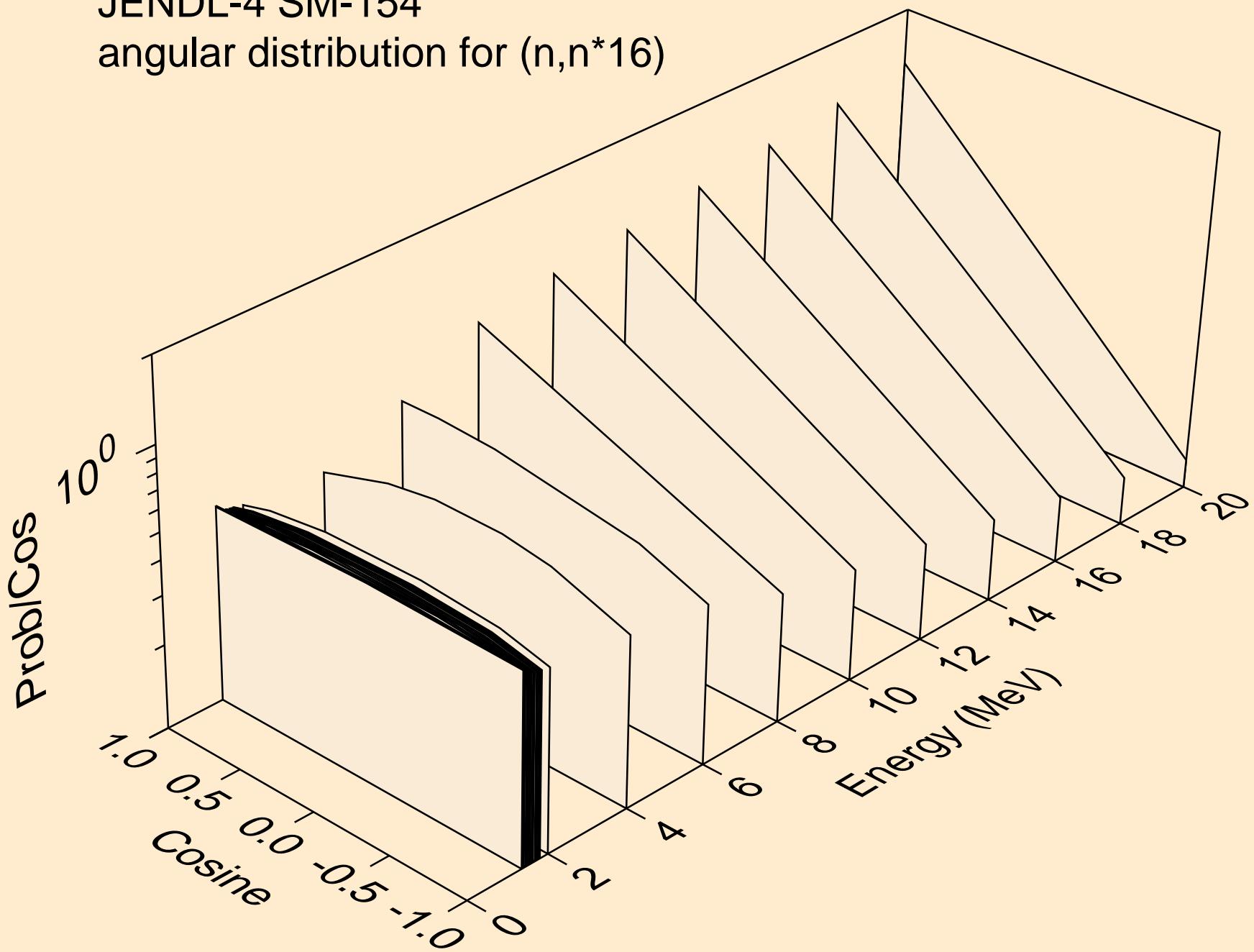
JENDL-4 SM-154  
angular distribution for ( $n,n^*14$ )



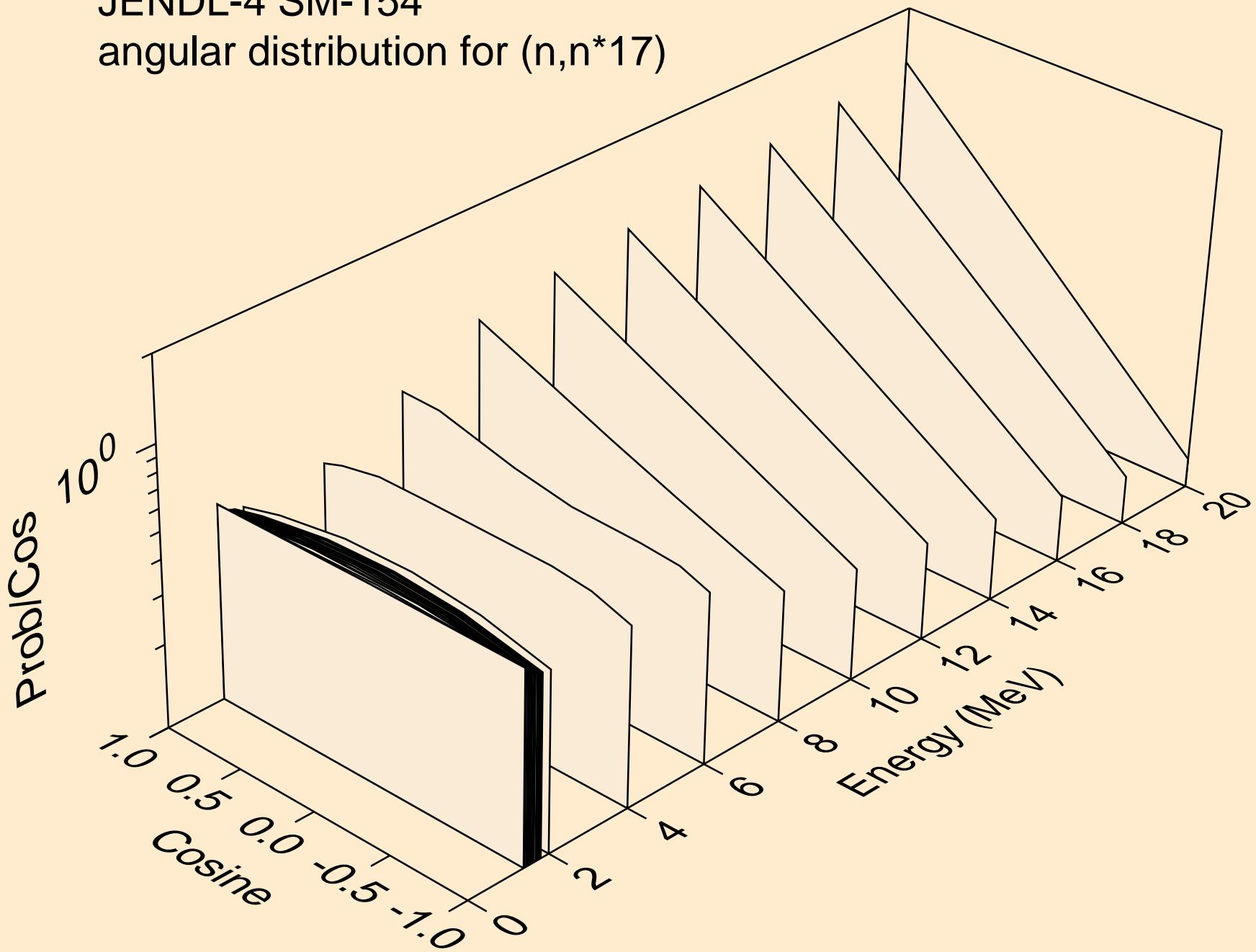
JENDL-4 SM-154  
angular distribution for  $(n,n^*15)$



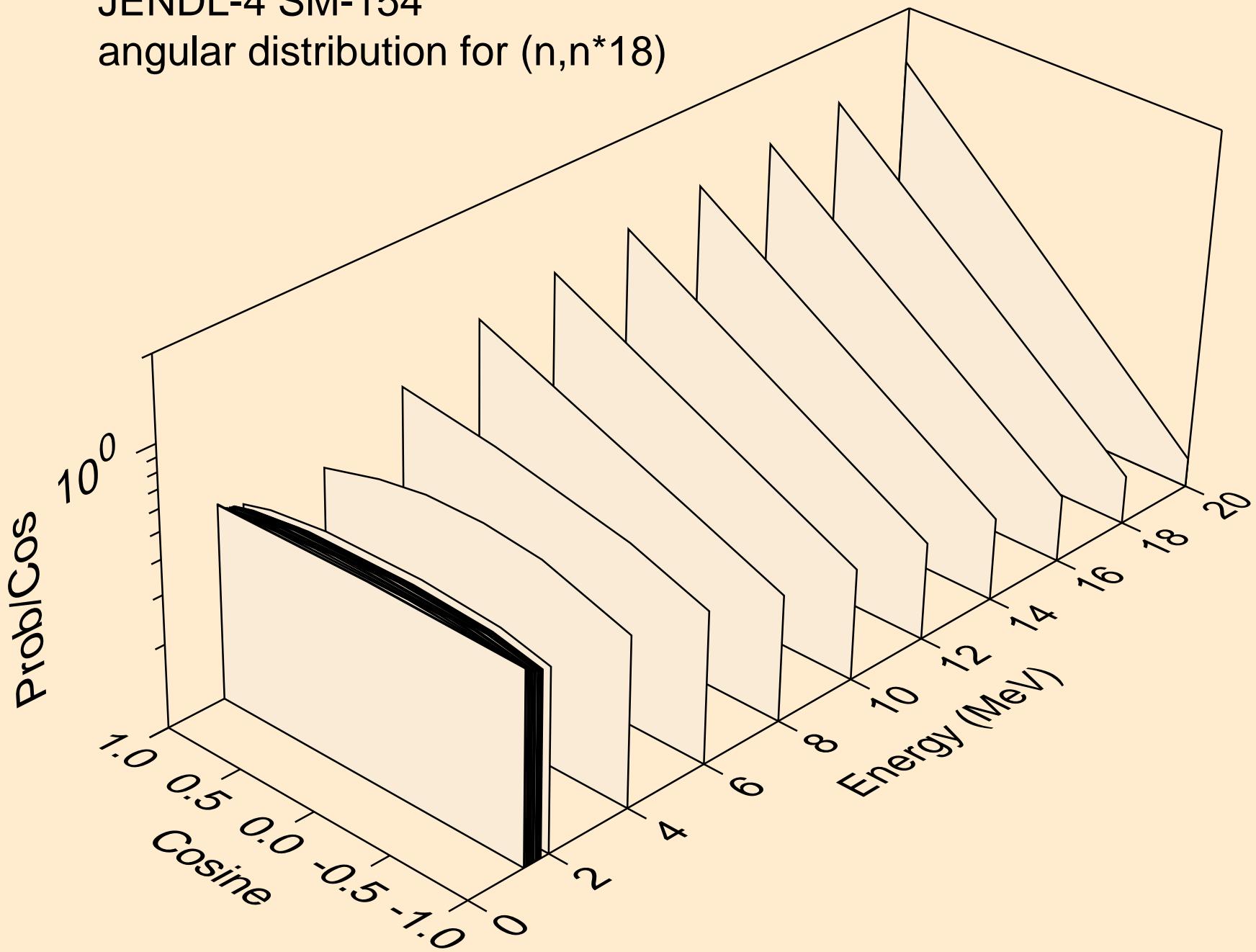
JENDL-4 SM-154  
angular distribution for (n,n\*16)



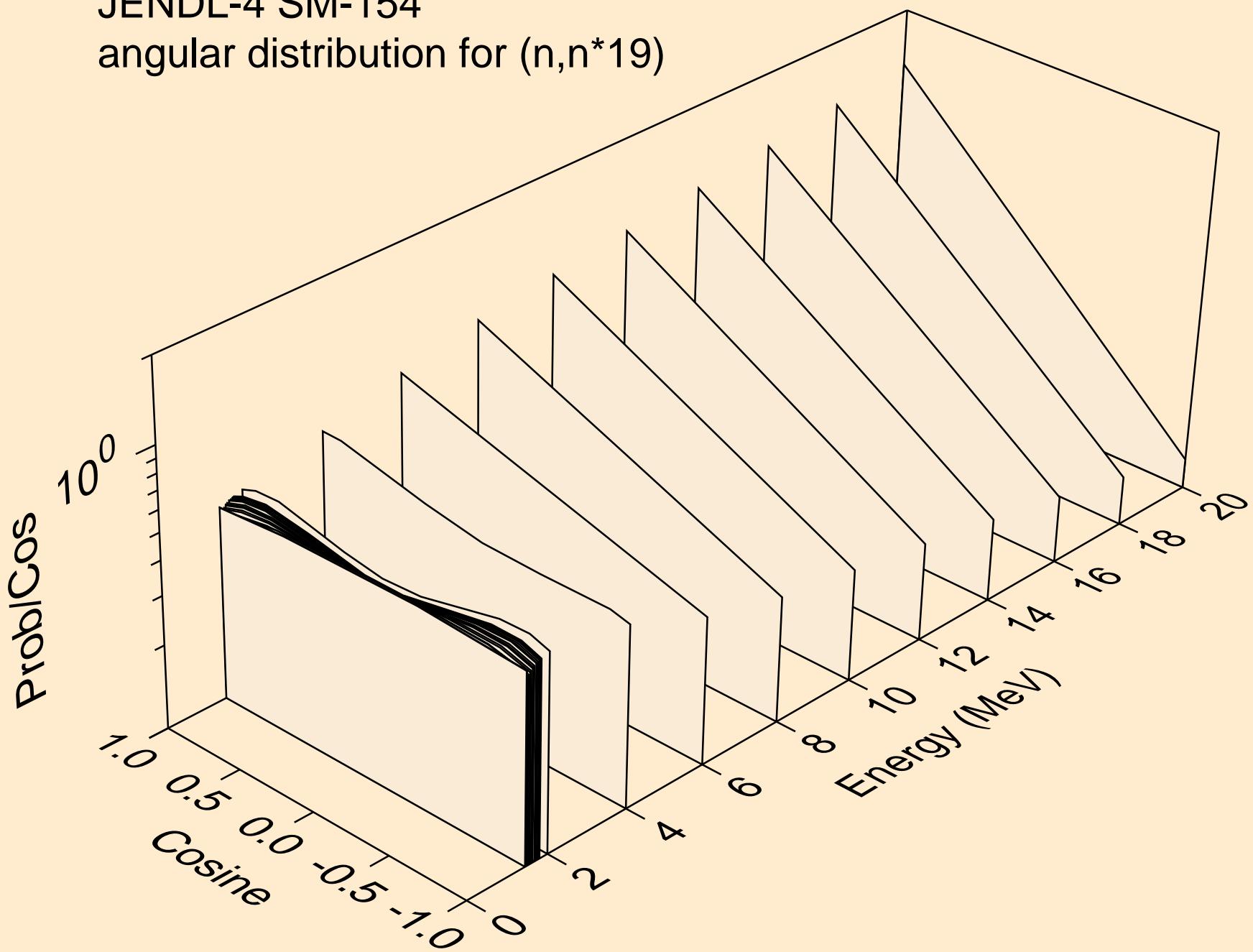
JENDL-4 SM-154  
angular distribution for (n,n\*17)



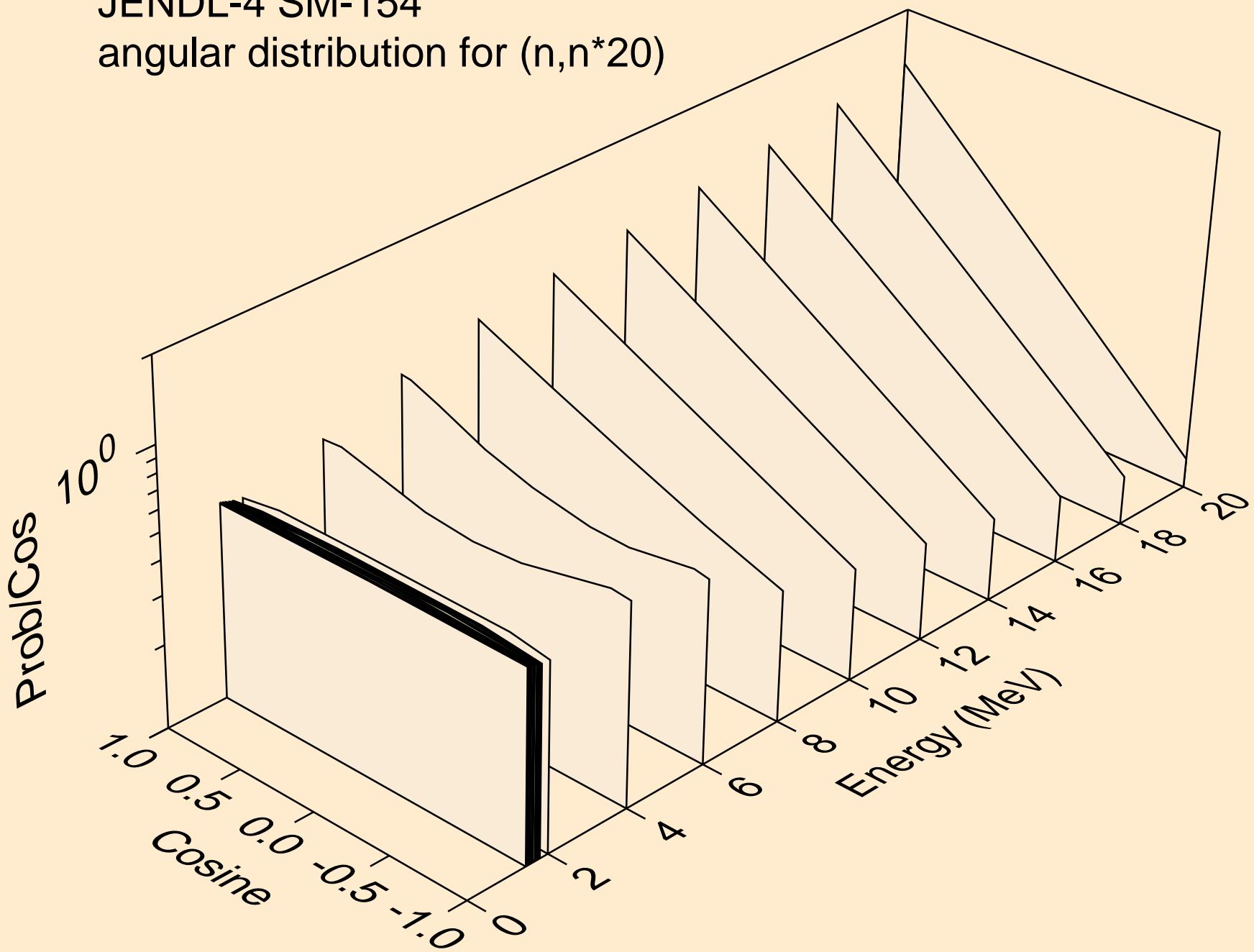
JENDL-4 SM-154  
angular distribution for (n,n\*18)



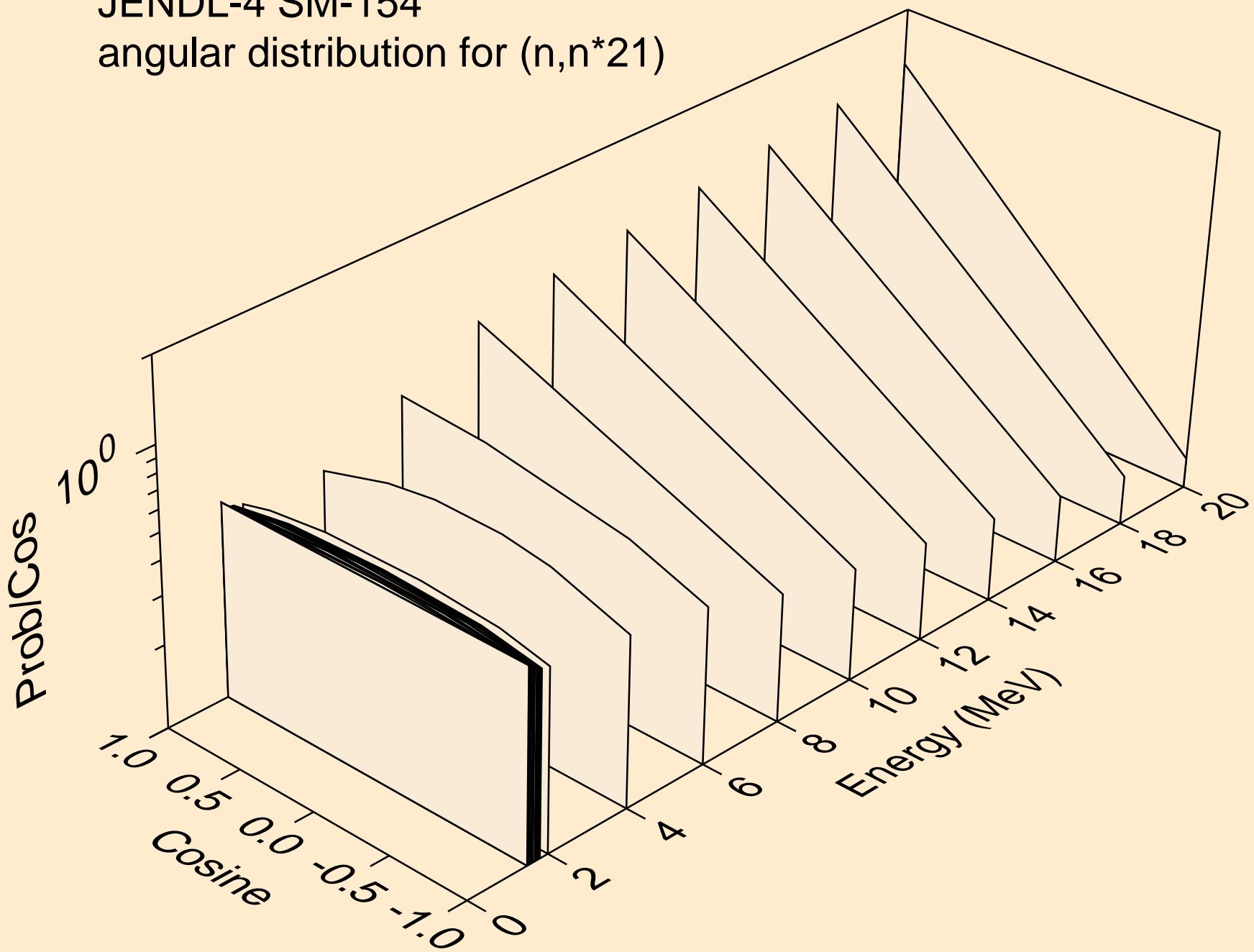
JENDL-4 SM-154  
angular distribution for (n,n\*19)



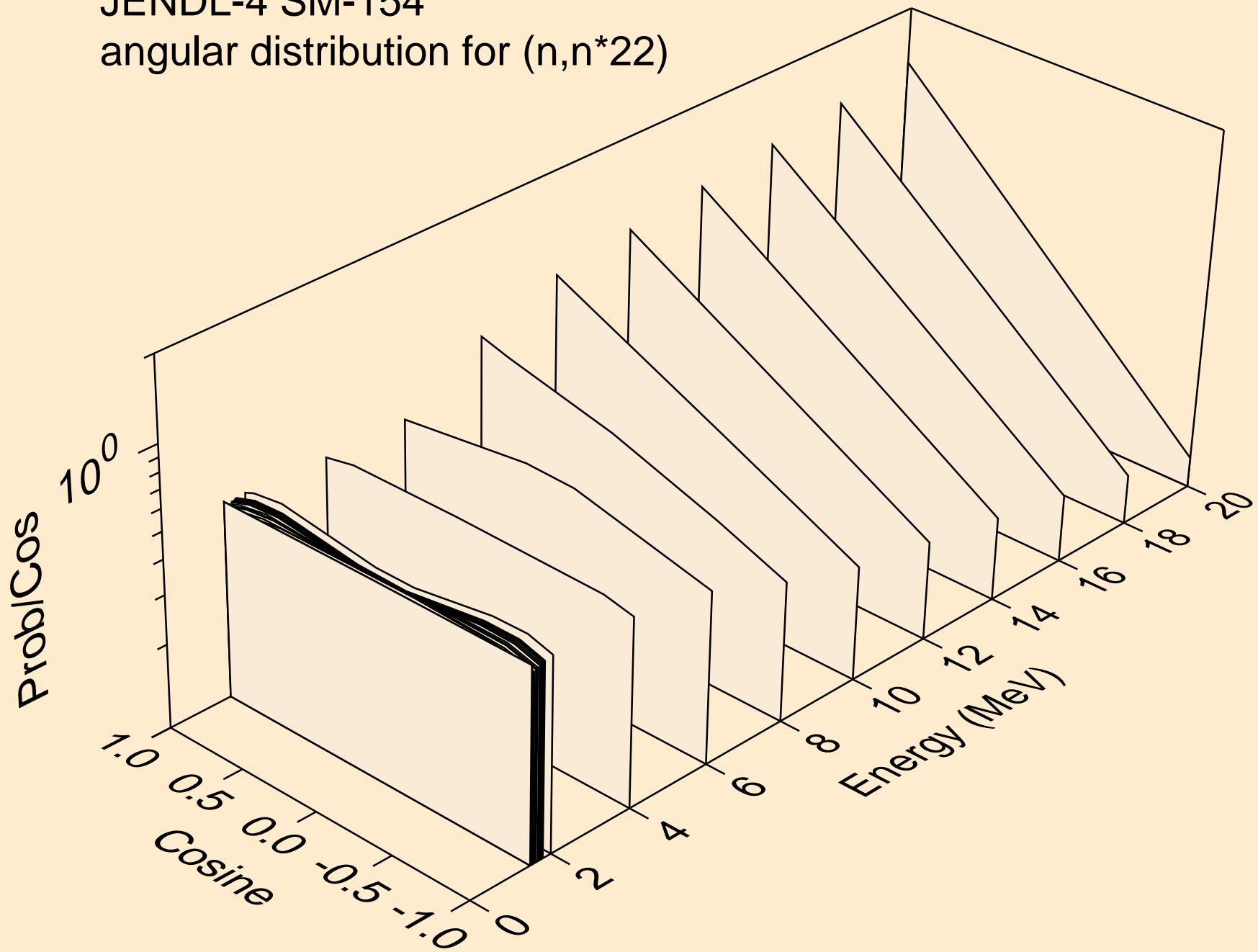
JENDL-4 SM-154  
angular distribution for (n,n\*20)



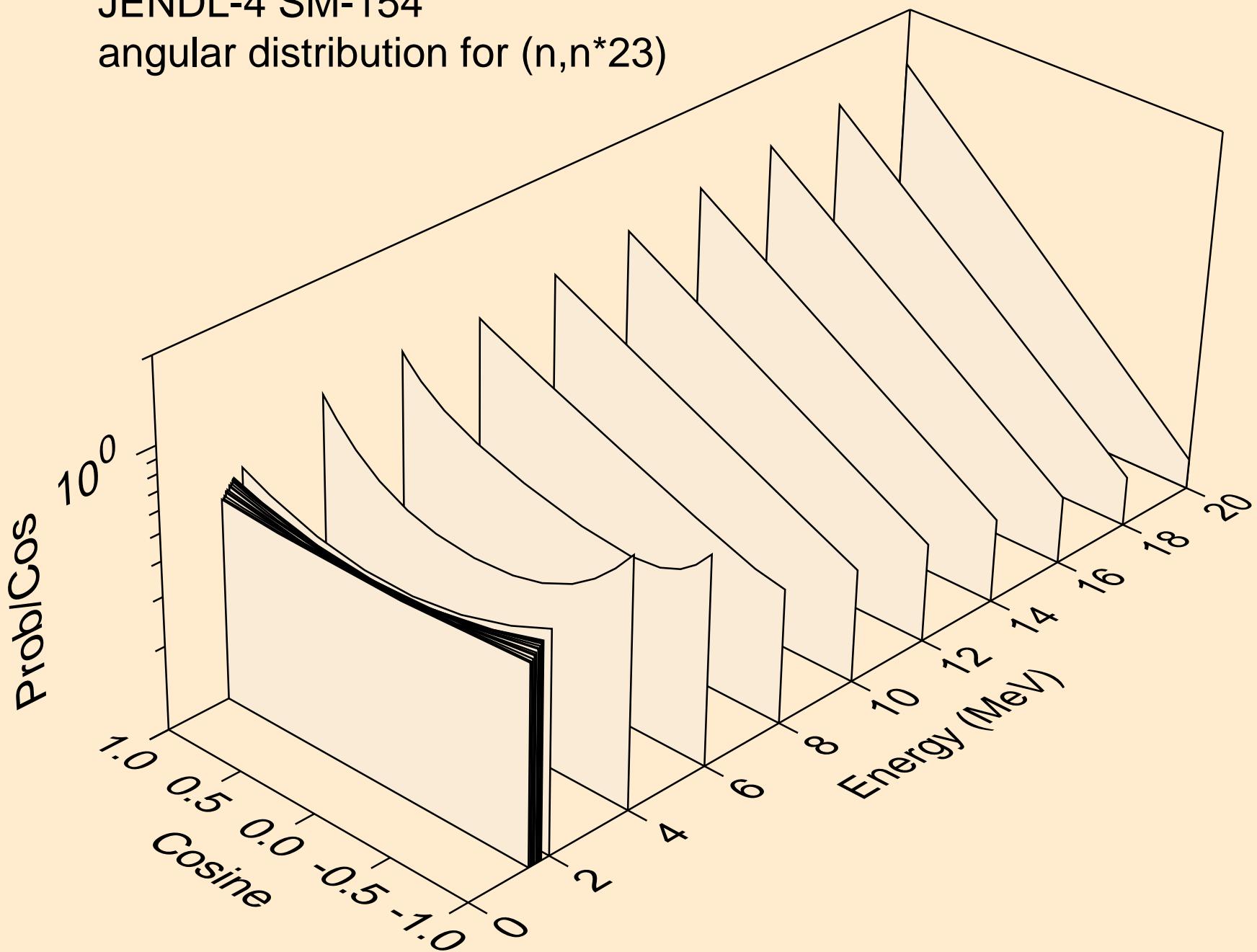
JENDL-4 SM-154  
angular distribution for ( $n,n^*$ )21



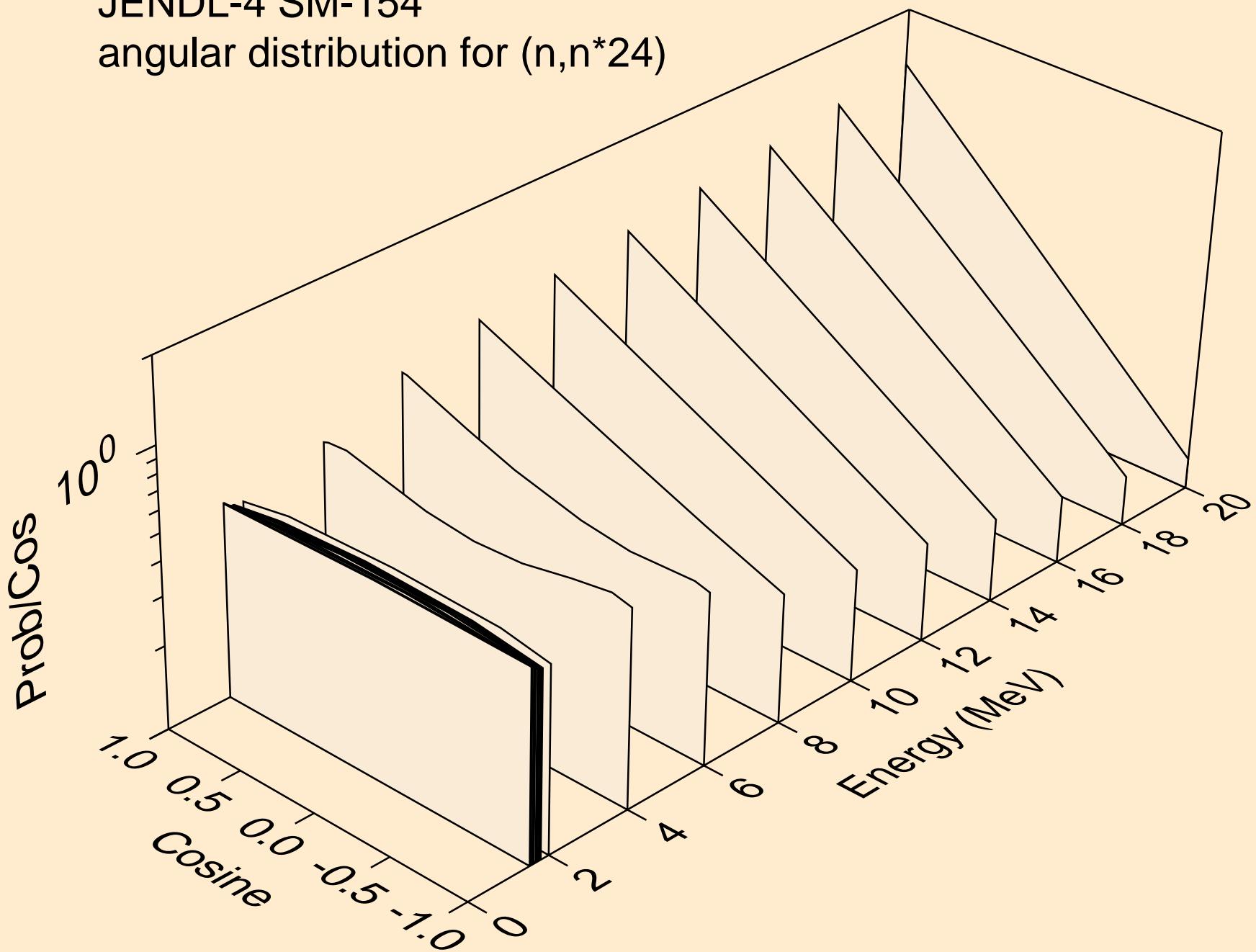
JENDL-4 SM-154  
angular distribution for  $(n,n^*22)$



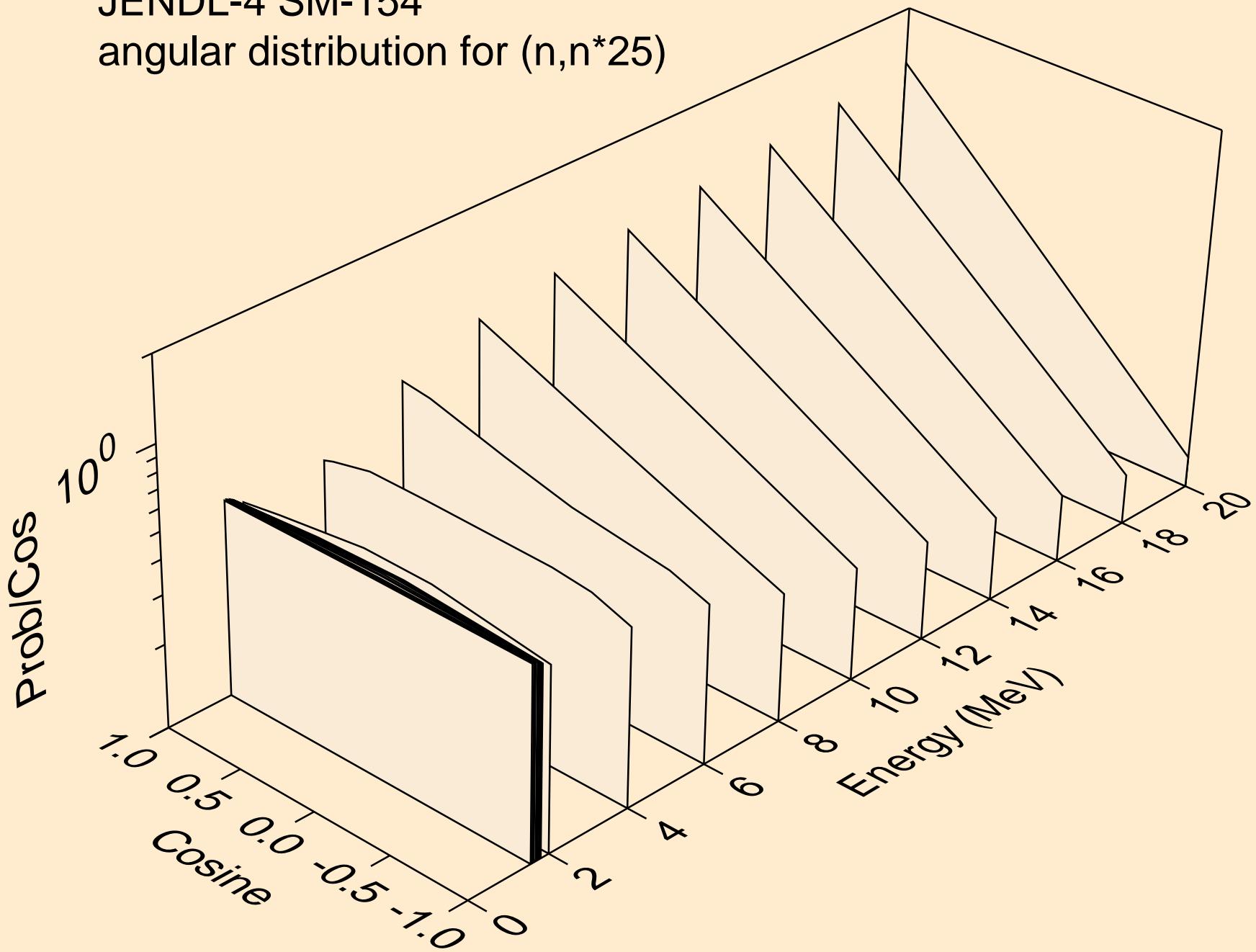
JENDL-4 SM-154  
angular distribution for  $(n,n^*23)$



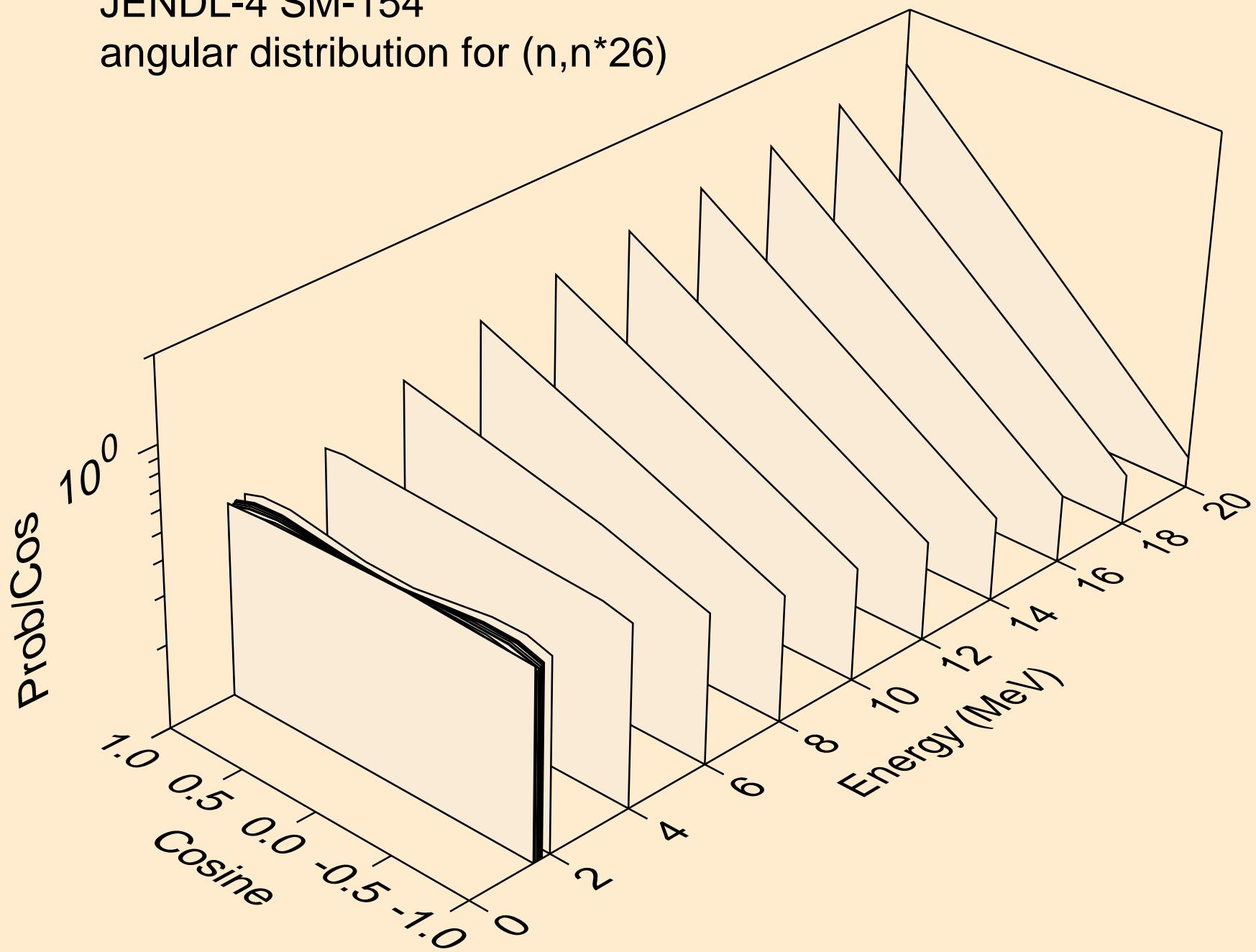
JENDL-4 SM-154  
angular distribution for ( $n,n^*$ )24



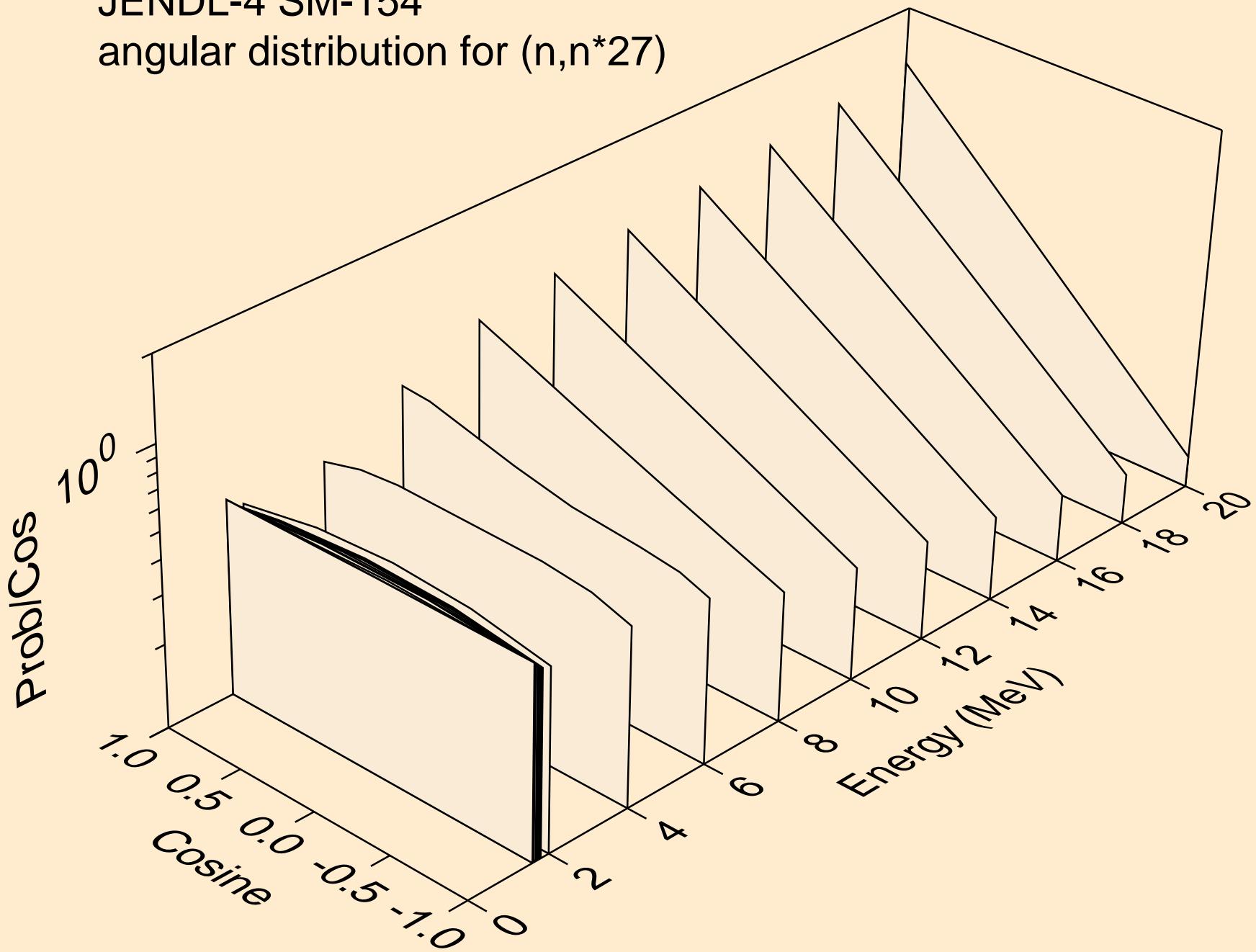
JENDL-4 SM-154  
angular distribution for (n,n\*25)



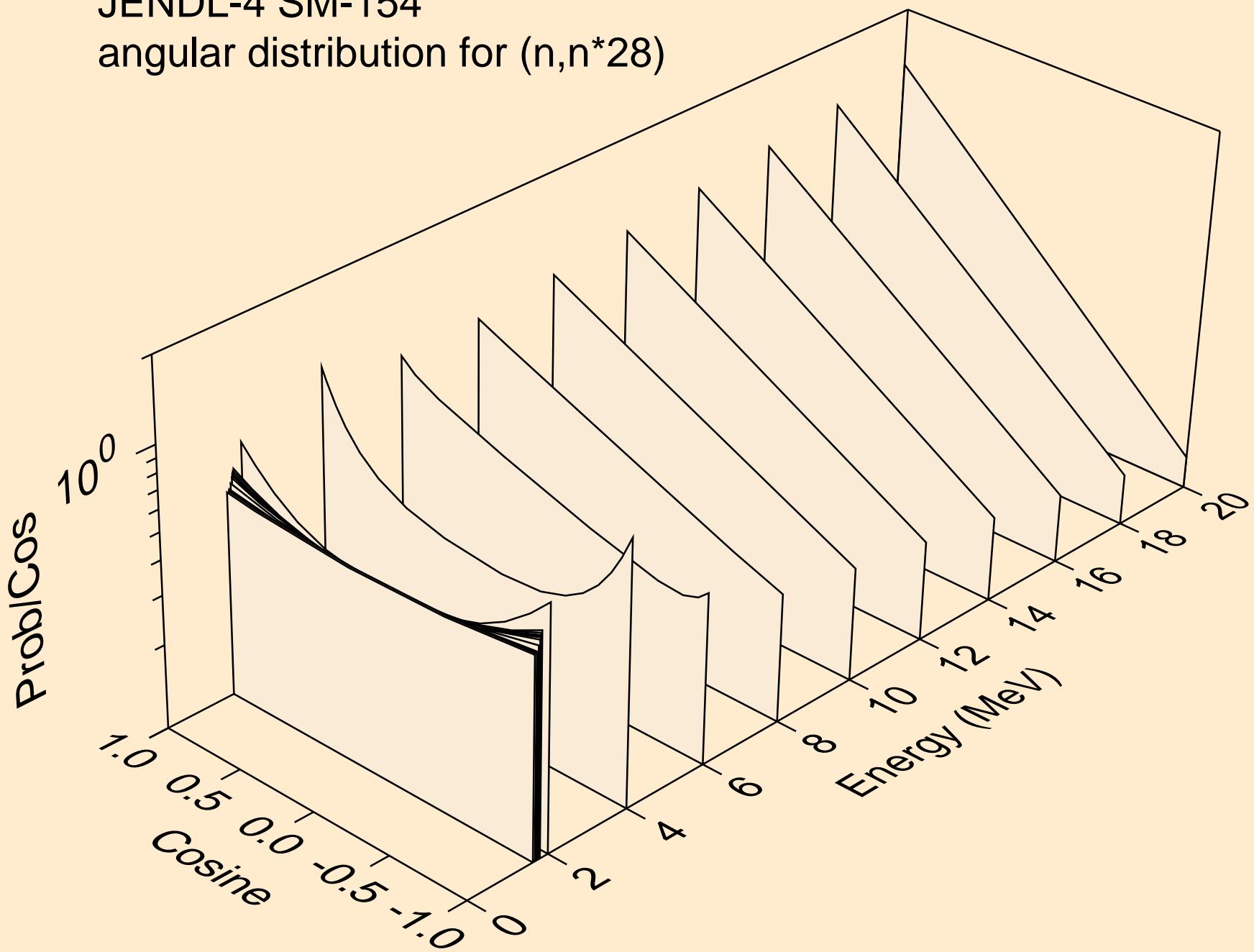
JENDL-4 SM-154  
angular distribution for (n,n\*26)



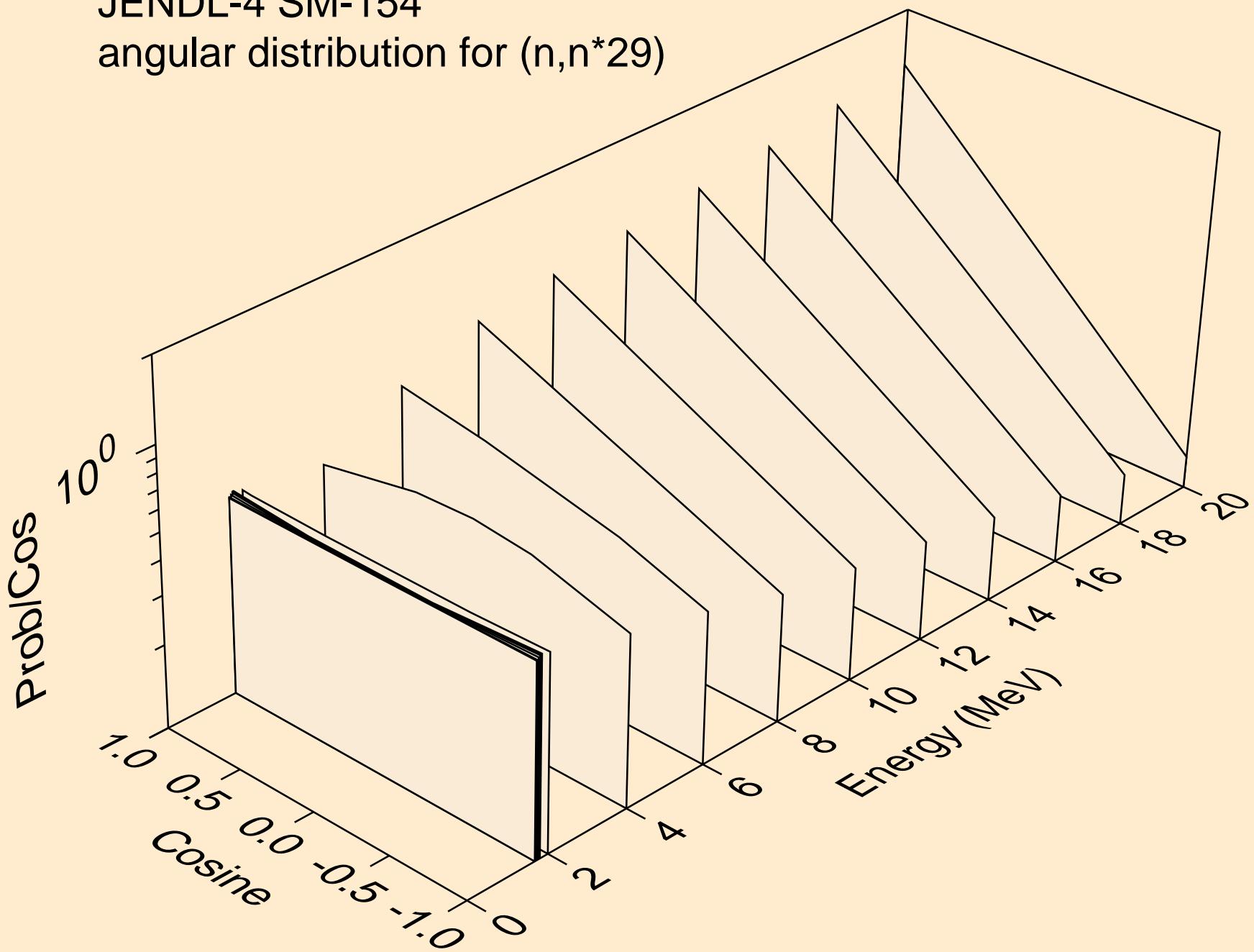
JENDL-4 SM-154  
angular distribution for ( $n, n^* 27$ )



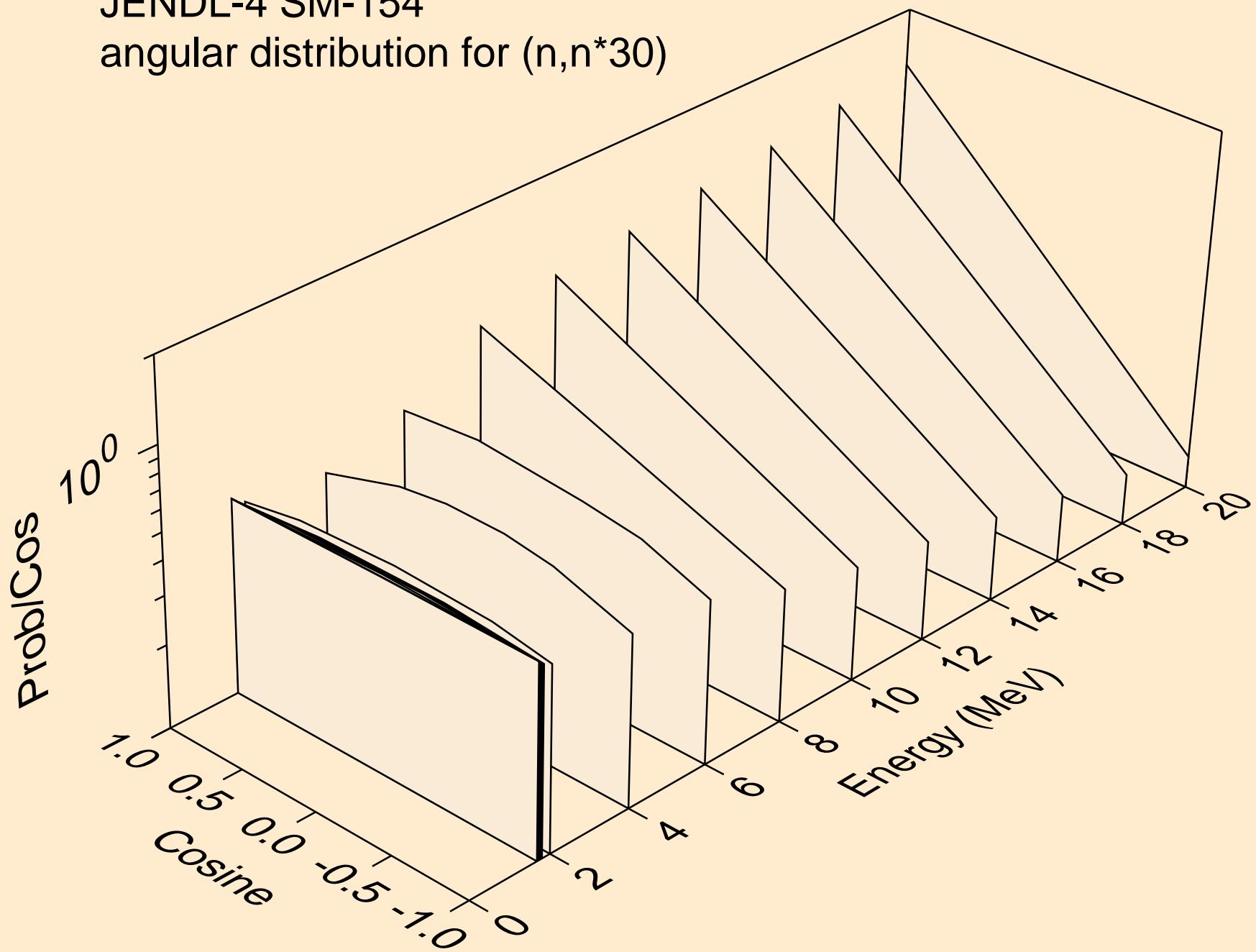
JENDL-4 SM-154  
angular distribution for  $(n,n^*28)$



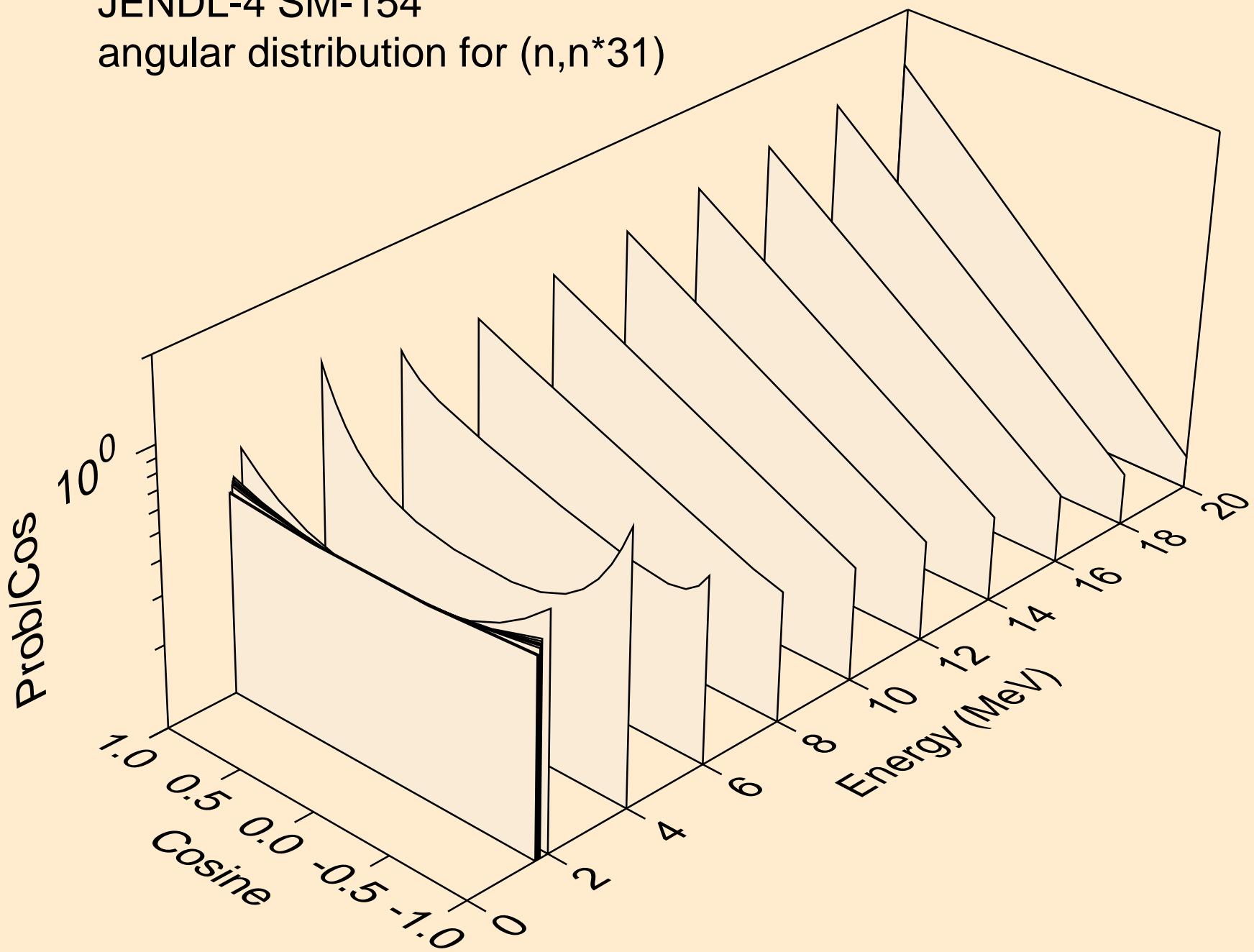
JENDL-4 SM-154  
angular distribution for (n,n\*29)



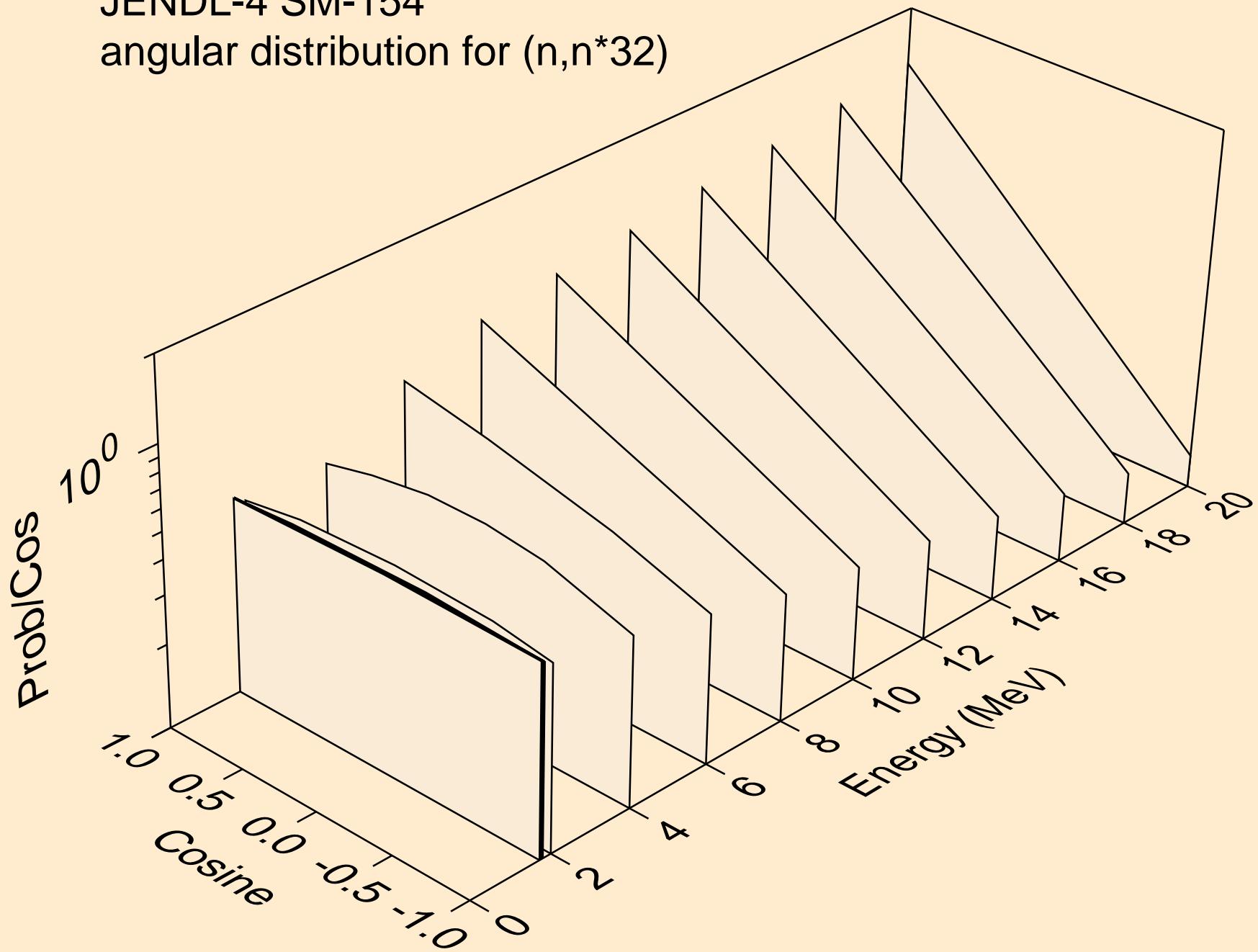
JENDL-4 SM-154  
angular distribution for (n,n\*30)



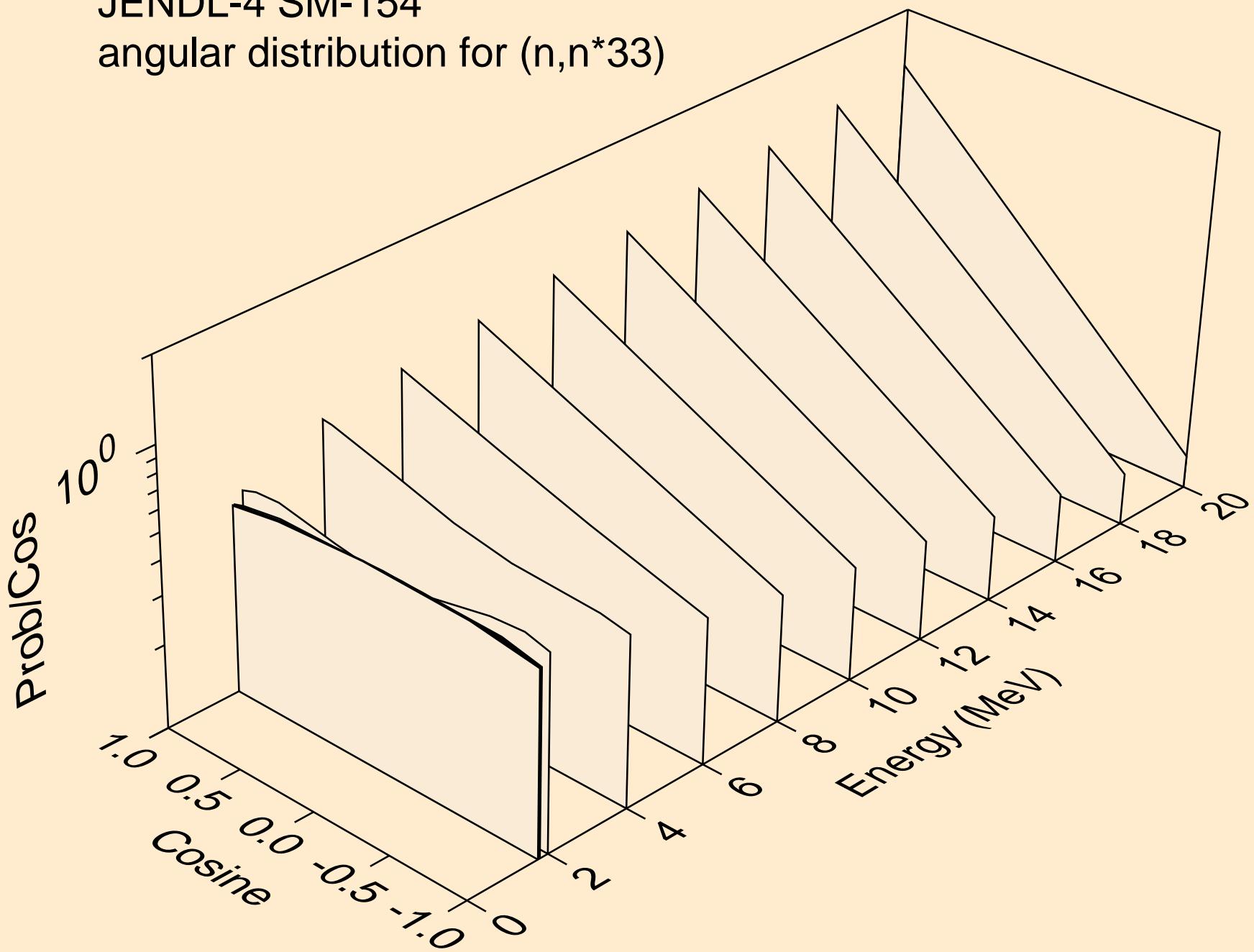
JENDL-4 SM-154  
angular distribution for  $(n,n^*31)$



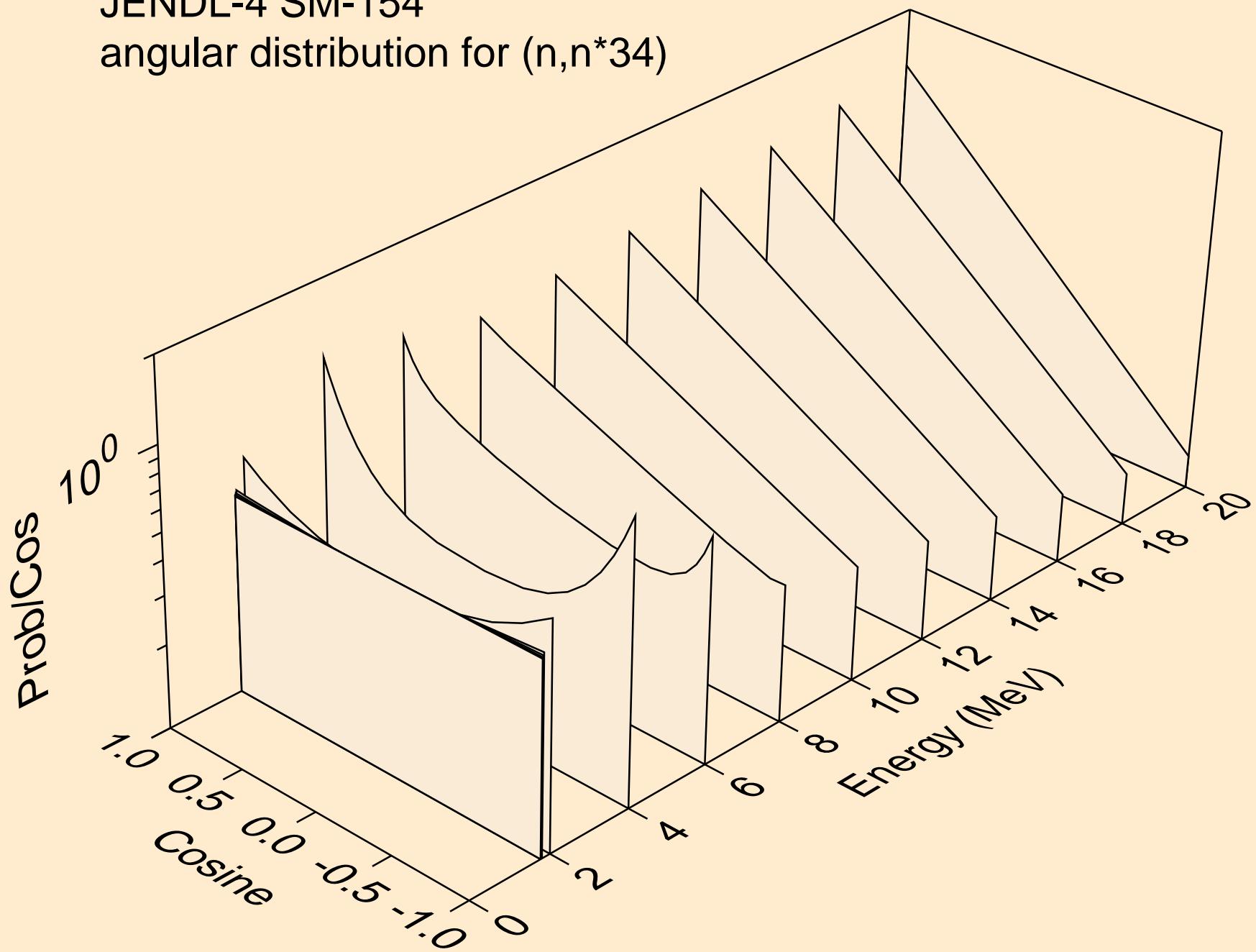
JENDL-4 SM-154  
angular distribution for (n,n\*32)



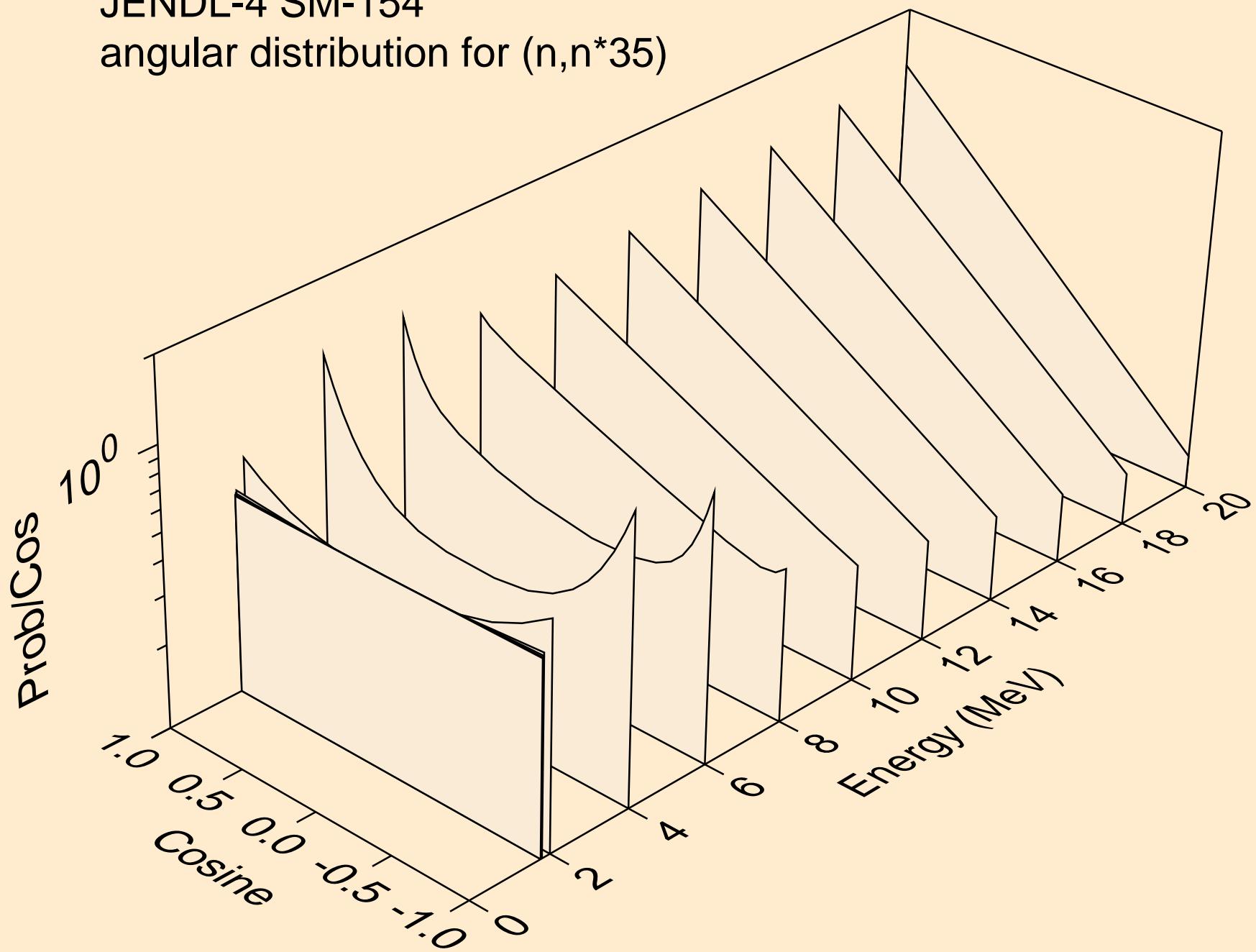
JENDL-4 SM-154  
angular distribution for ( $n, n^* 33$ )



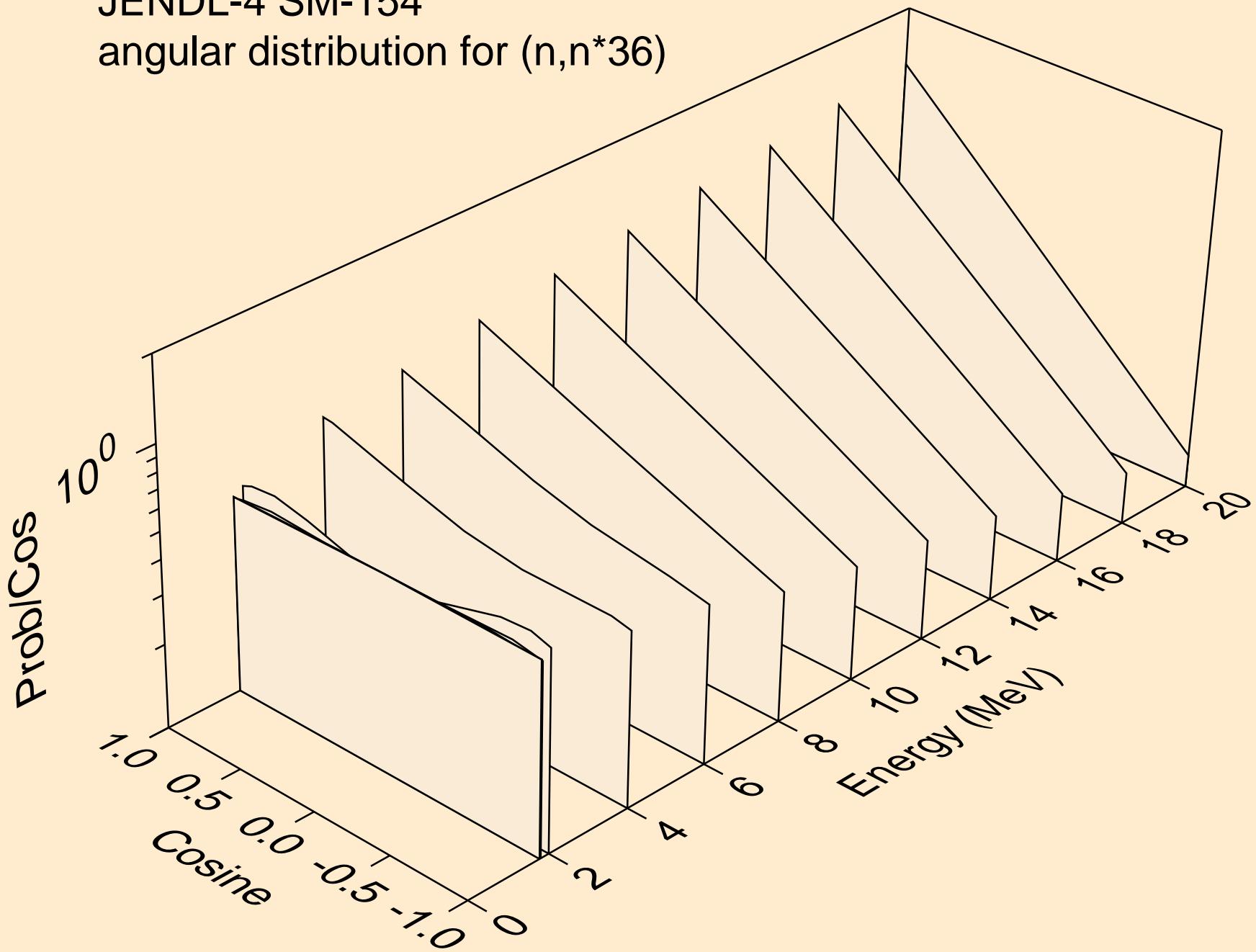
JENDL-4 SM-154  
angular distribution for ( $n,n^*$ )34



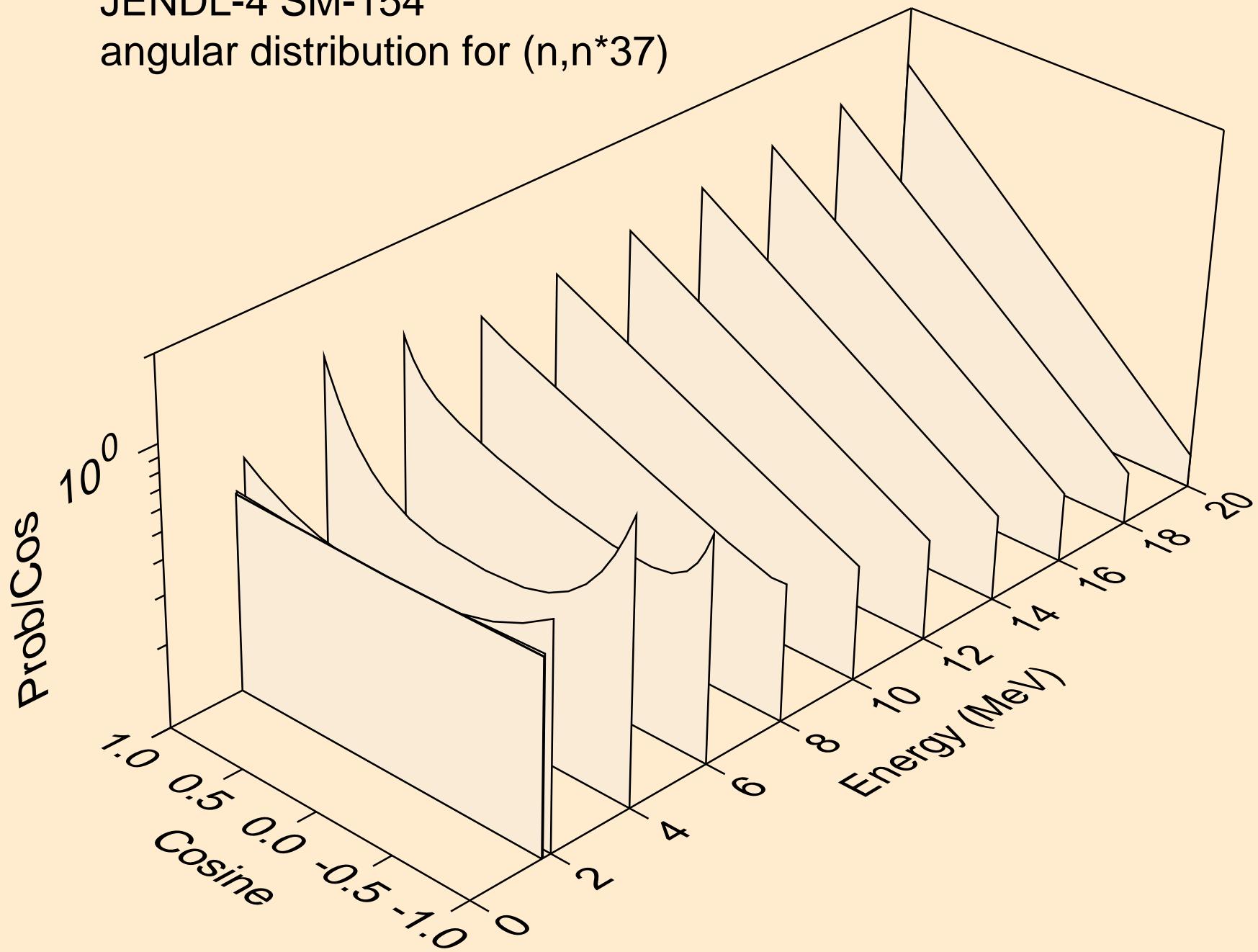
JENDL-4 SM-154  
angular distribution for (n,n\*35)



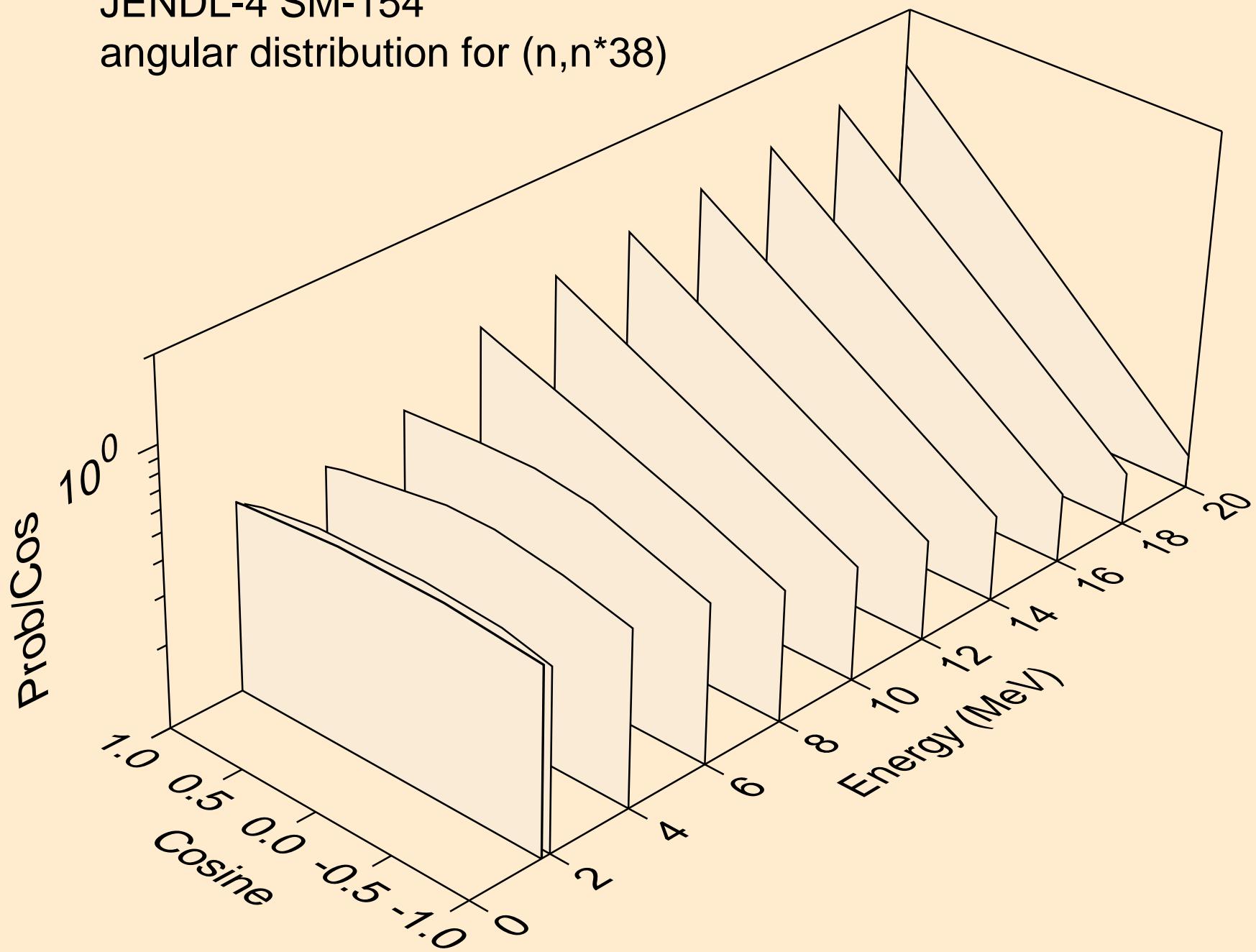
JENDL-4 SM-154  
angular distribution for (n,n\*36)



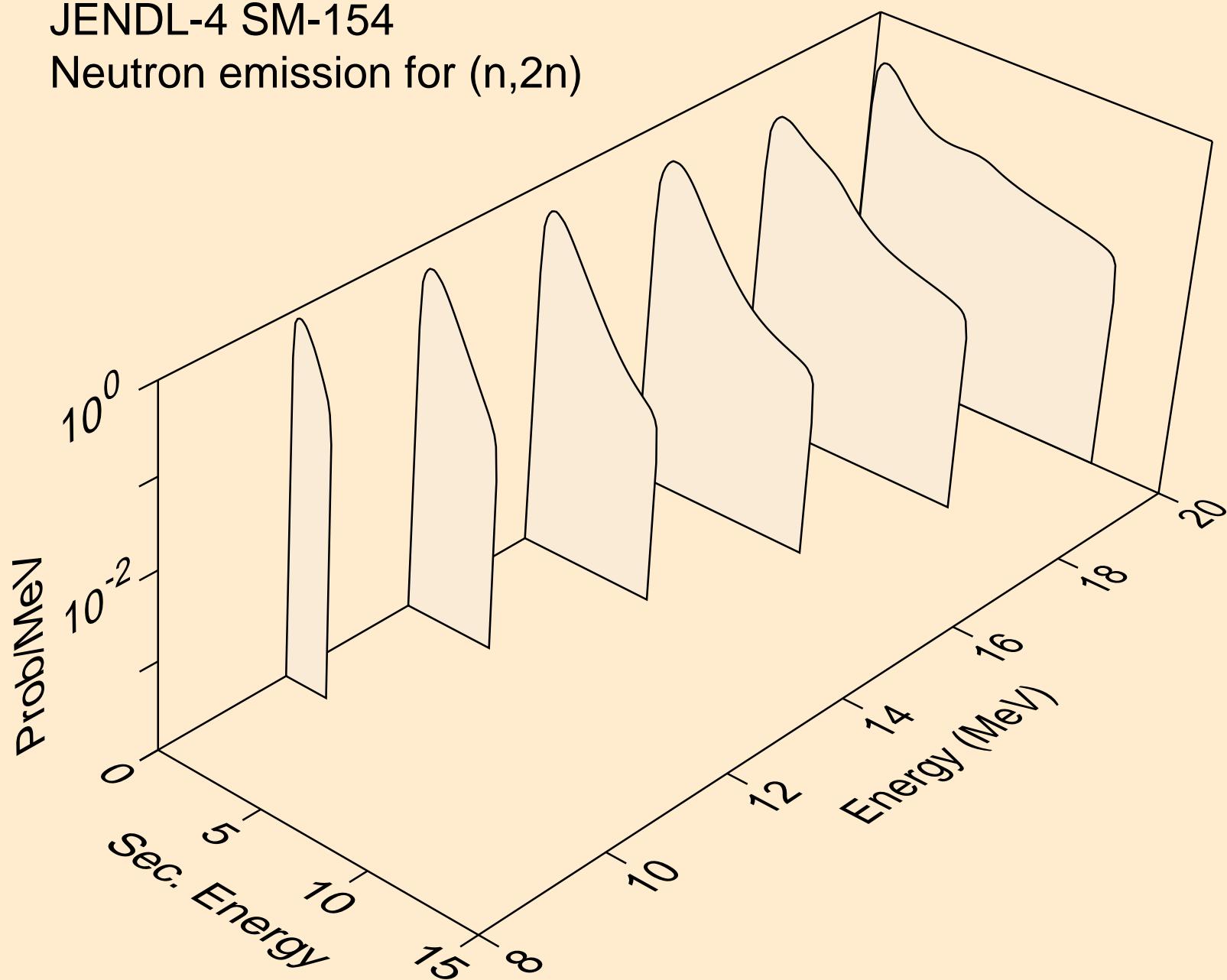
JENDL-4 SM-154  
angular distribution for ( $n, n^* 37$ )



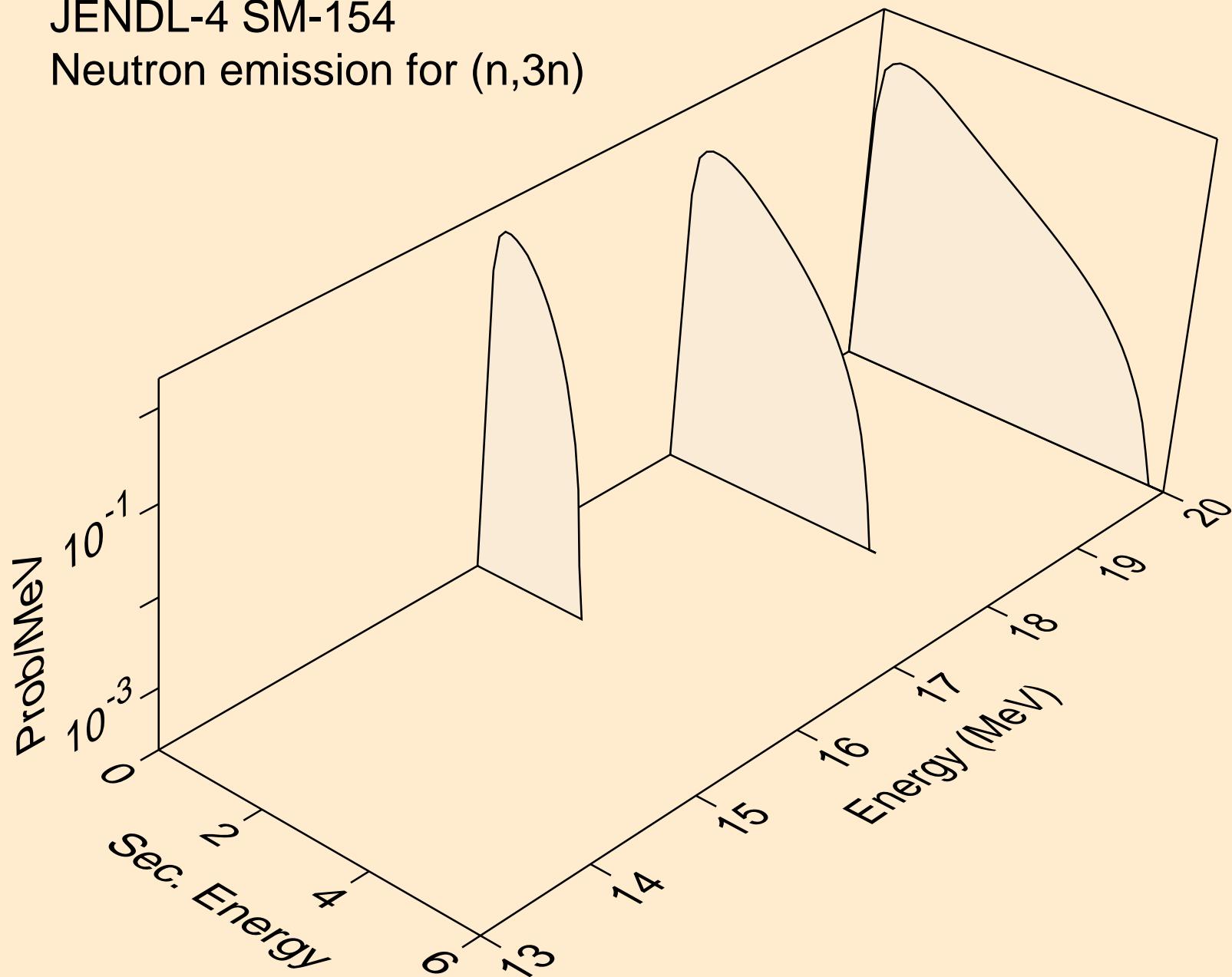
JENDL-4 SM-154  
angular distribution for (n,n\*38)



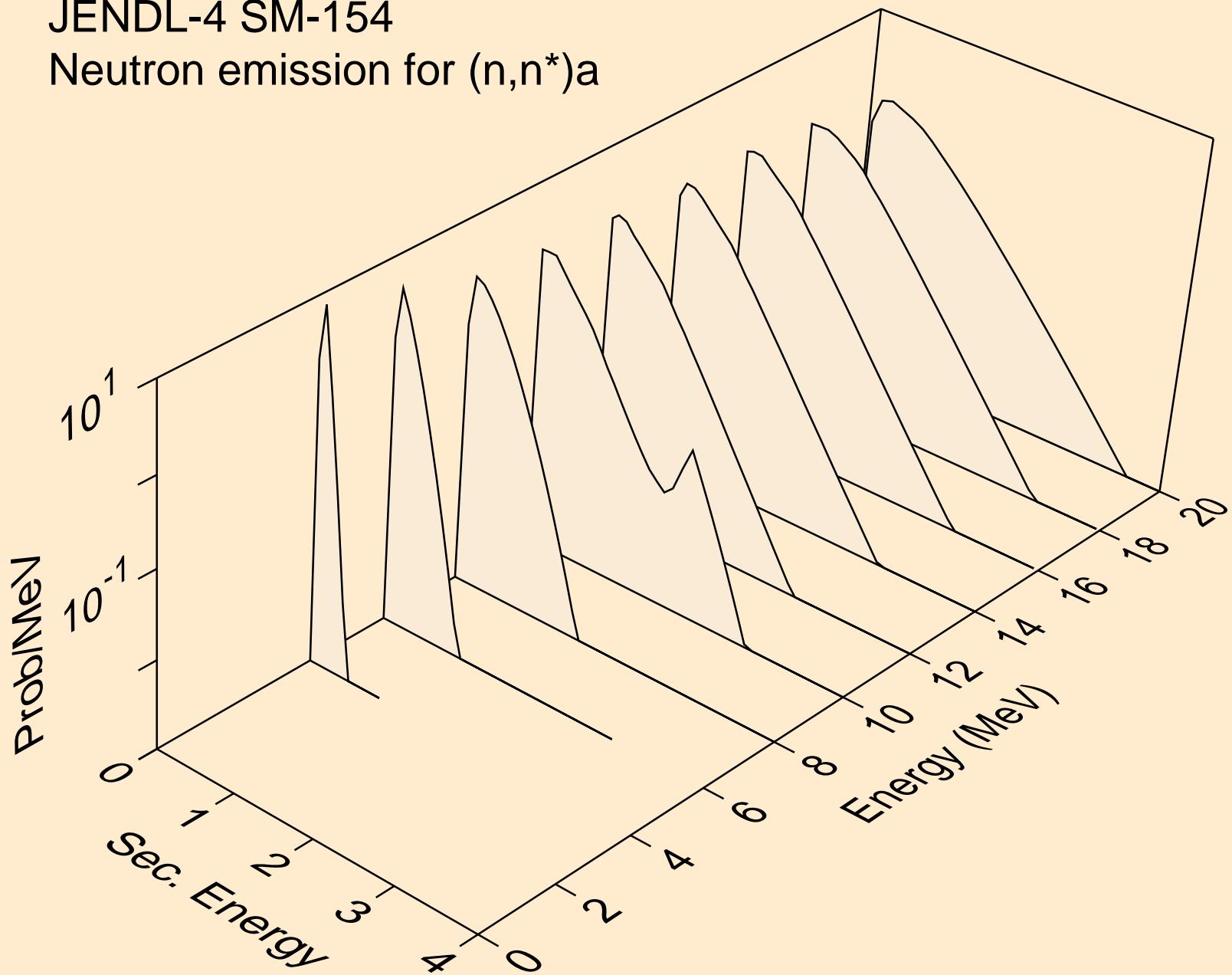
JENDL-4 SM-154  
Neutron emission for  $(n,2n)$



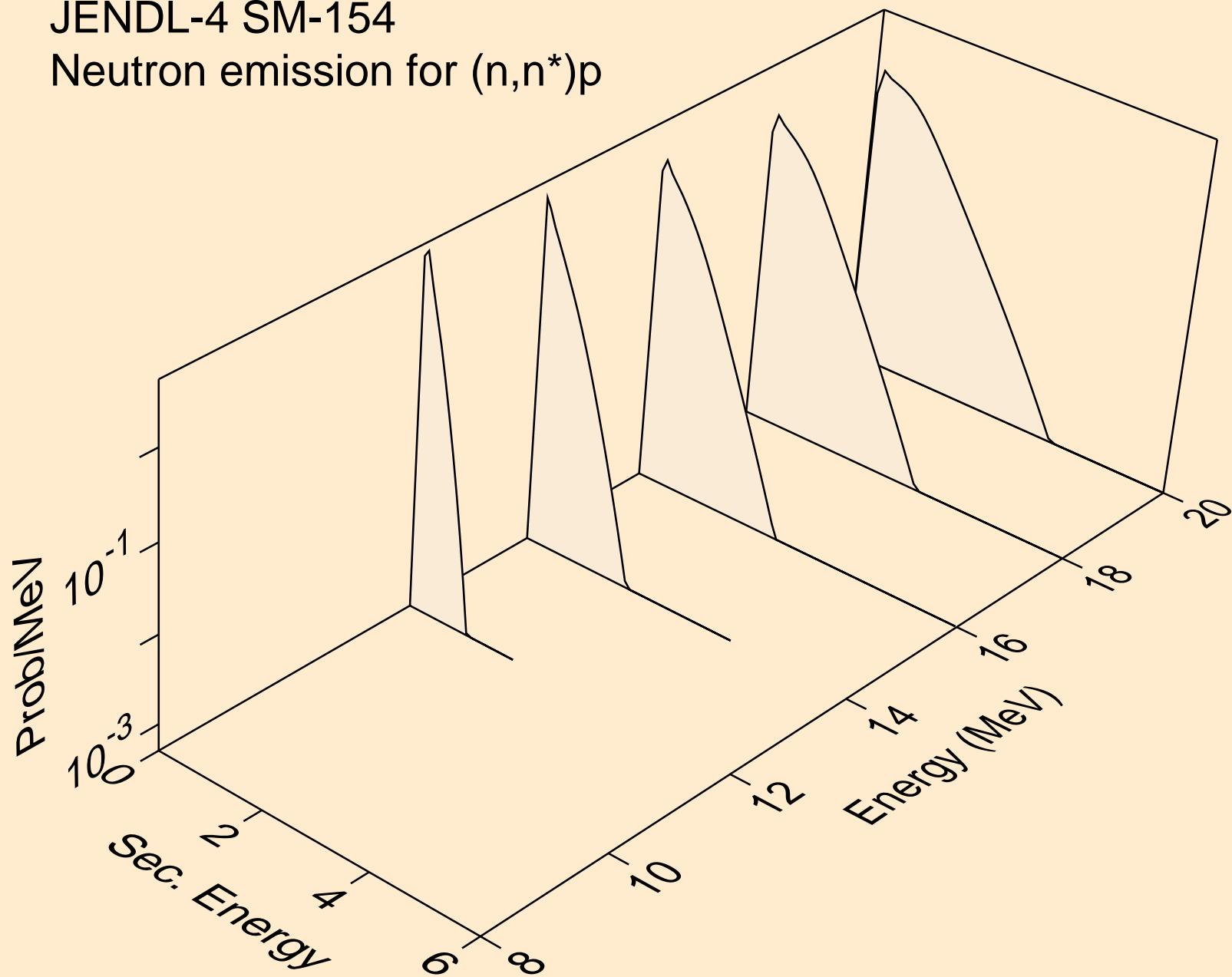
JENDL-4 SM-154  
Neutron emission for  $(n,3n)$



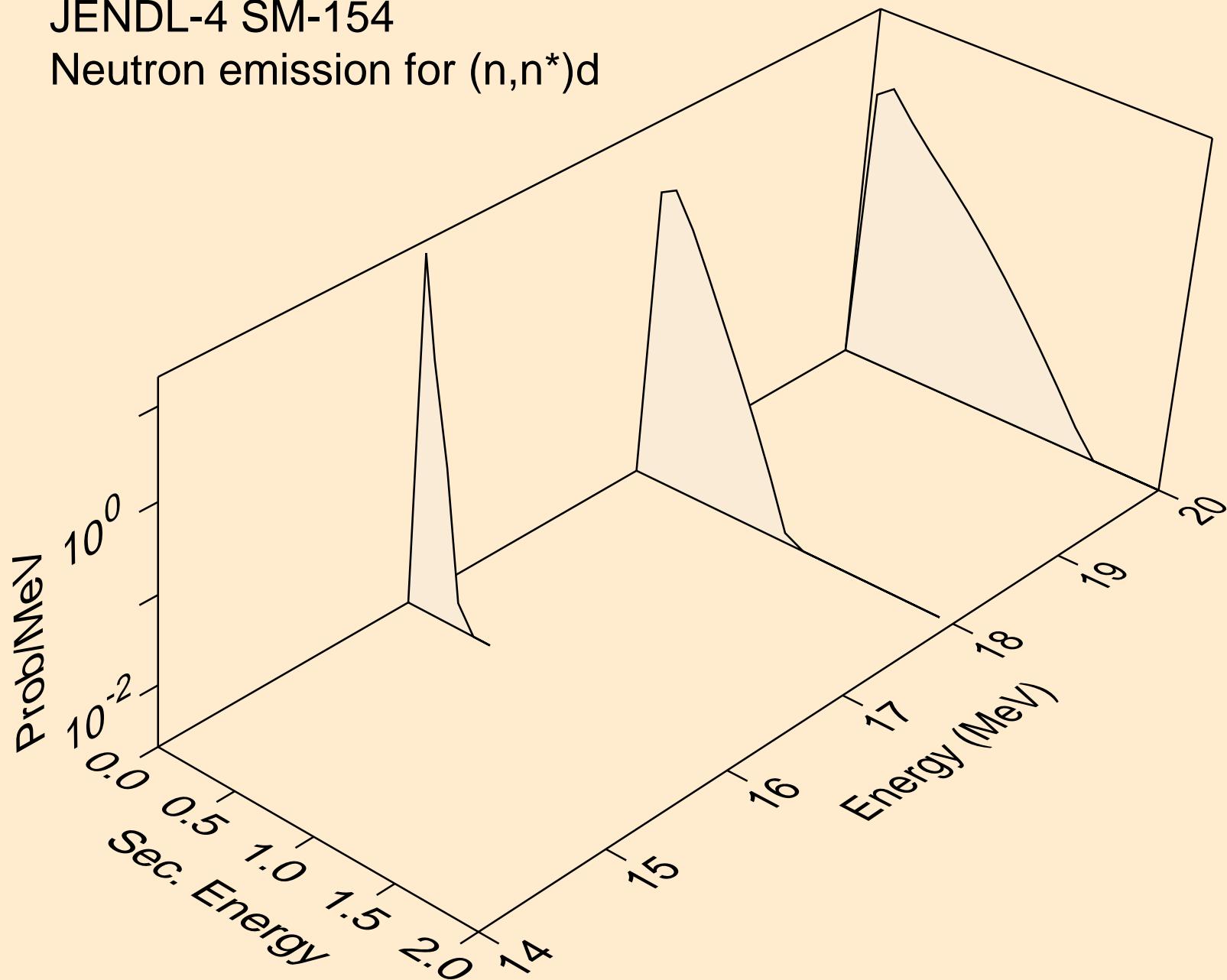
JENDL-4 SM-154  
Neutron emission for  $(n,n^*)a$



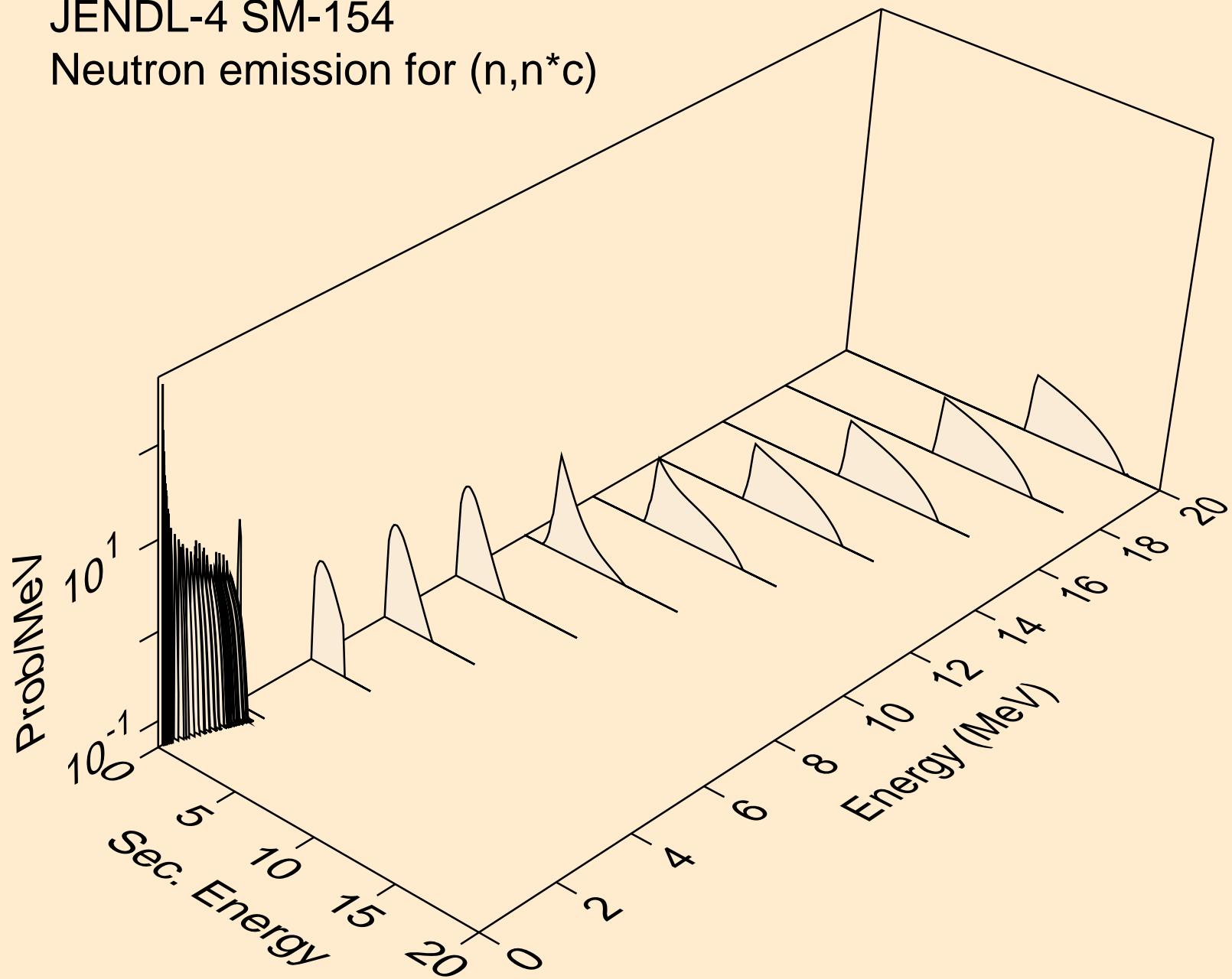
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Neutron emission for  $(n,n^*)p$



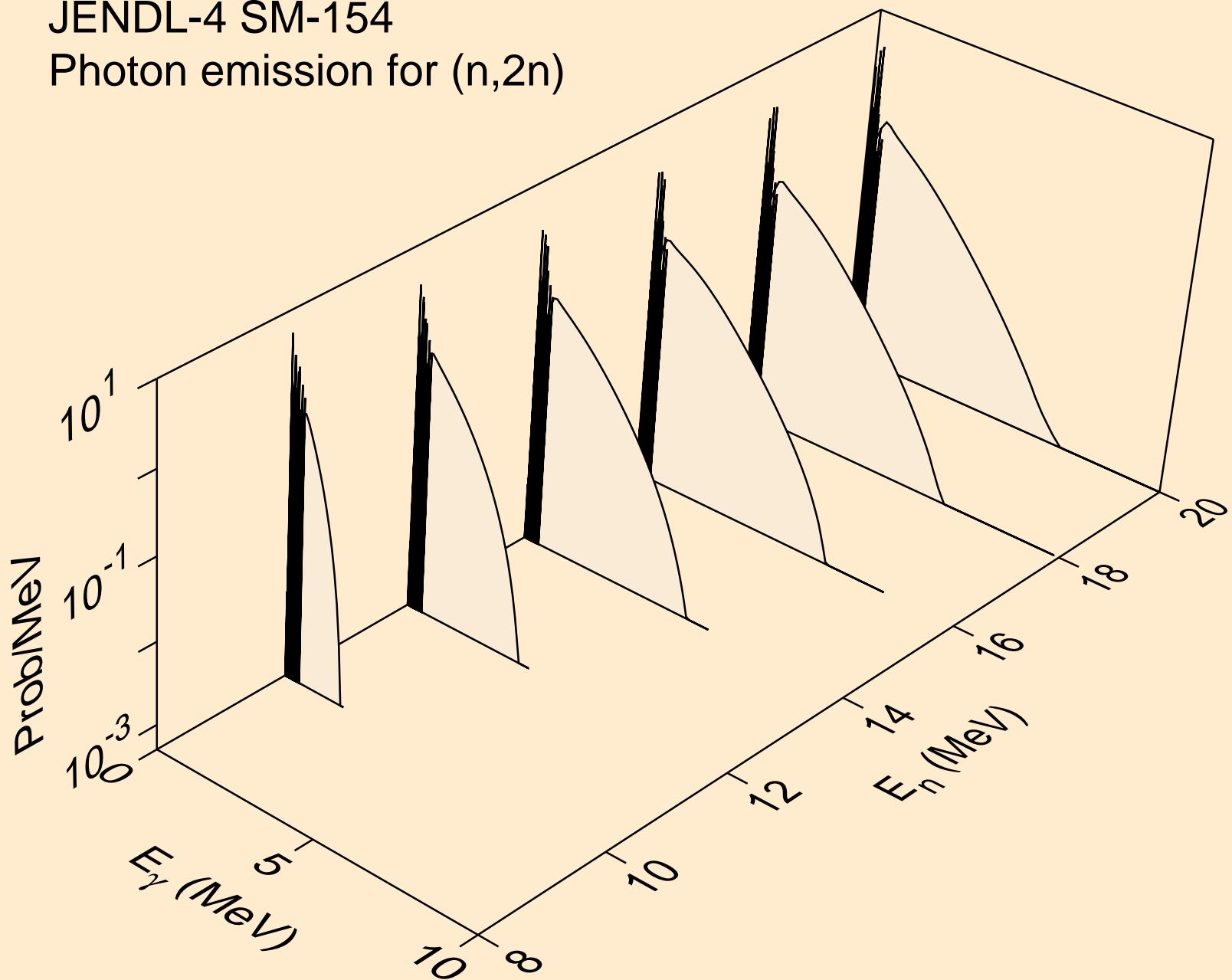
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Neutron emission for  $(n,n^*)d$



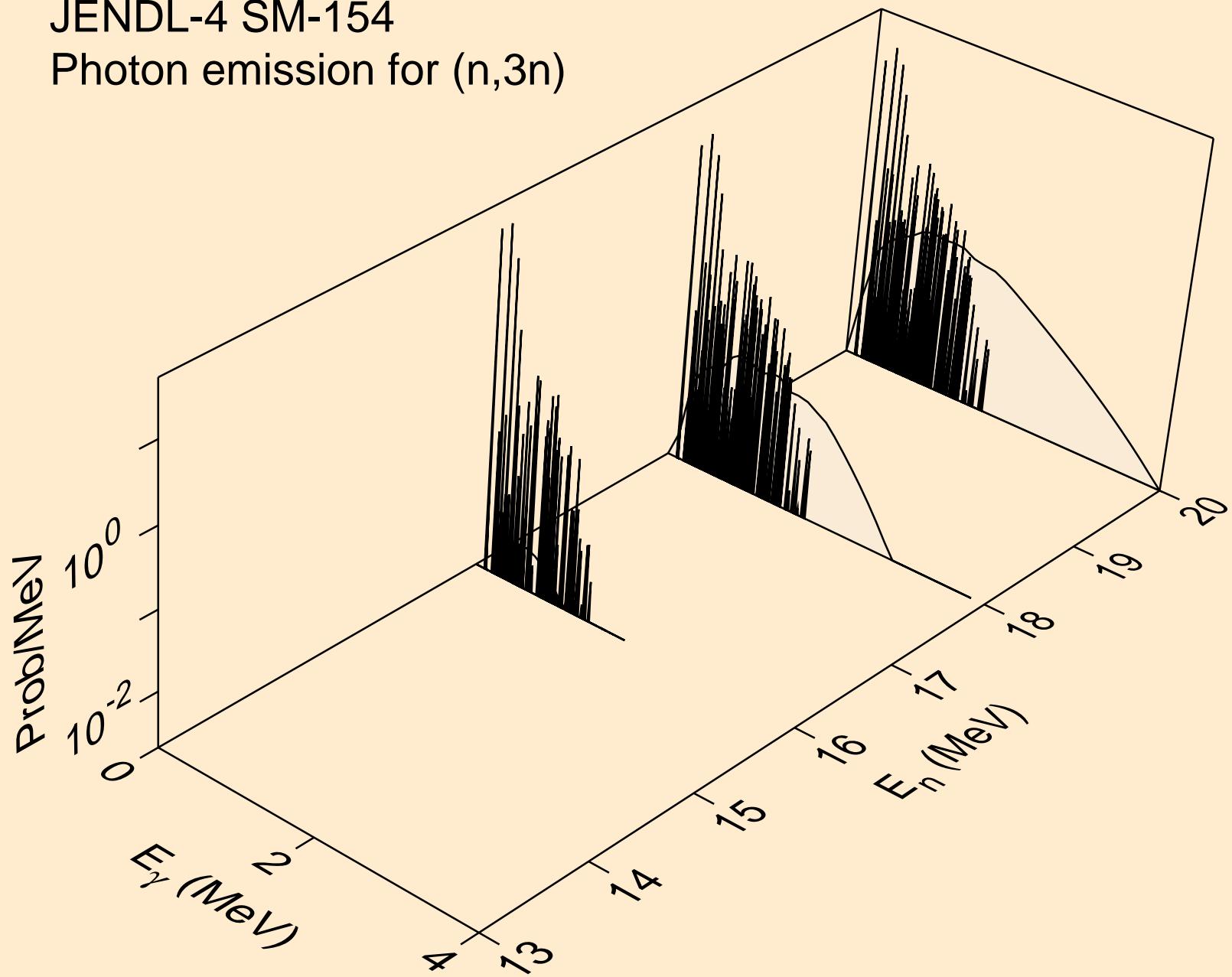
JENDL-4 SM-154  
Neutron emission for  $(n,n^*c)$



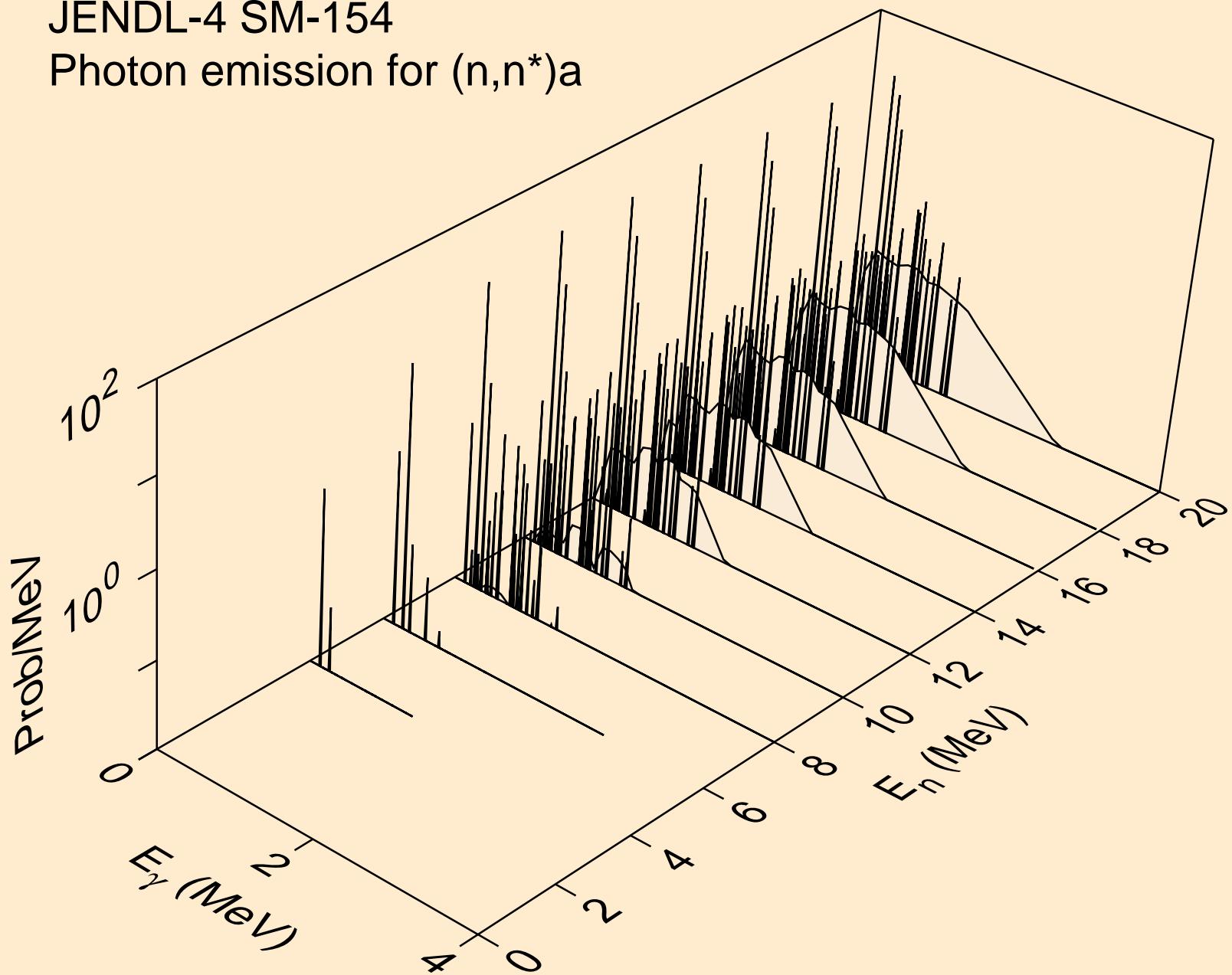
JENDL-4 SM-154  
Photon emission for (n,2n)



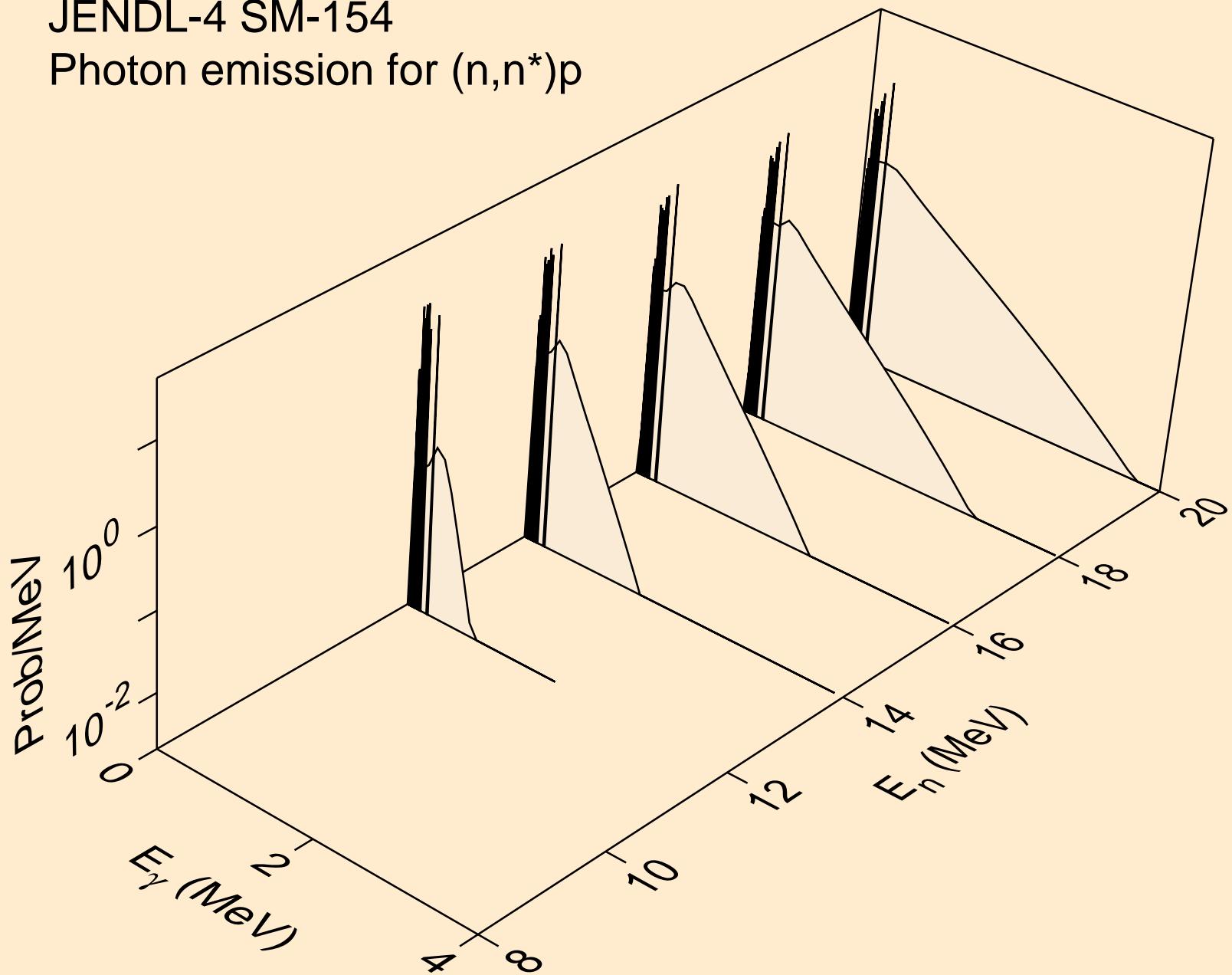
JENDL-4 SM-154  
Photon emission for (n,3n)



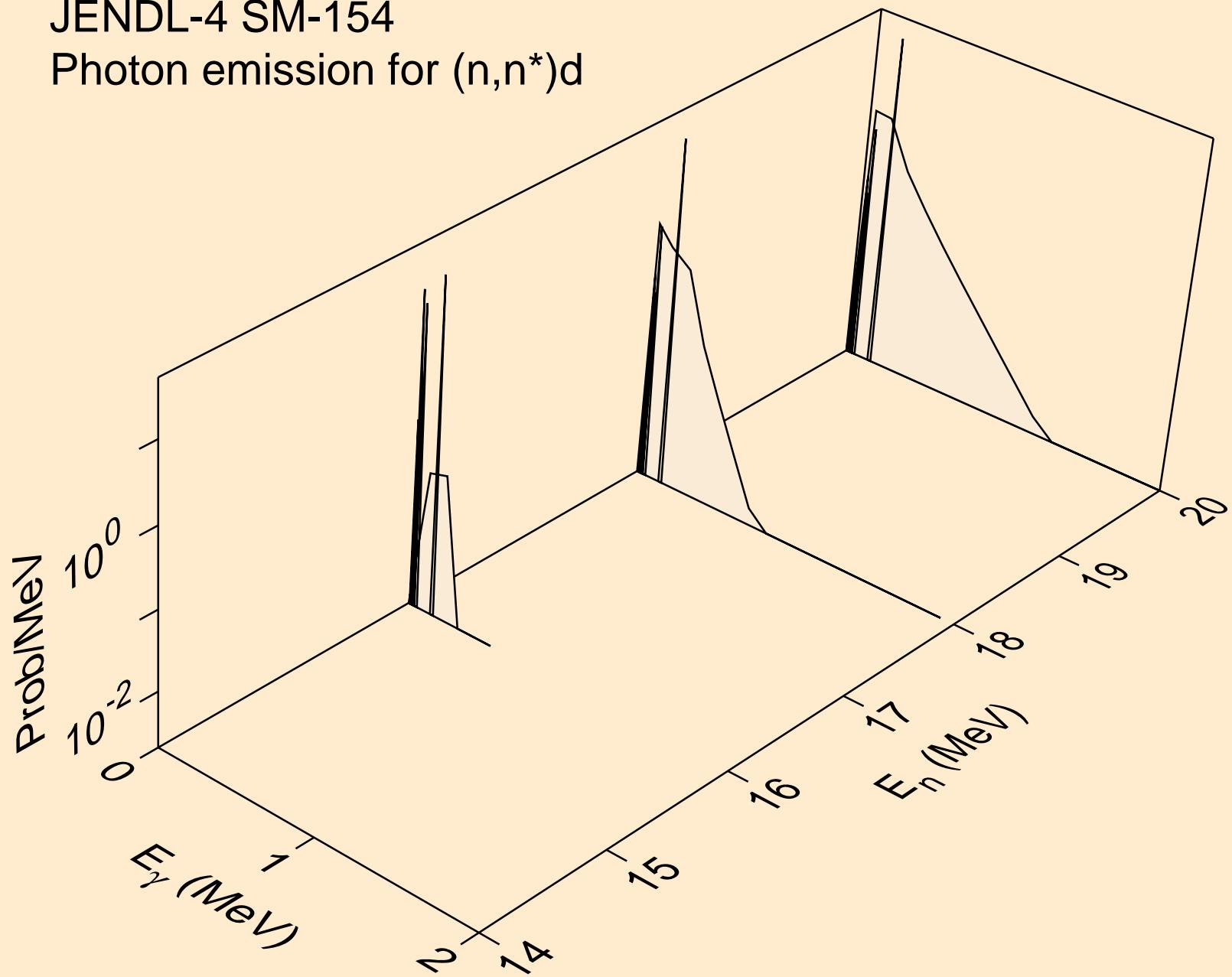
JENDL-4 SM-154  
Photon emission for  $(n,n^*)a$



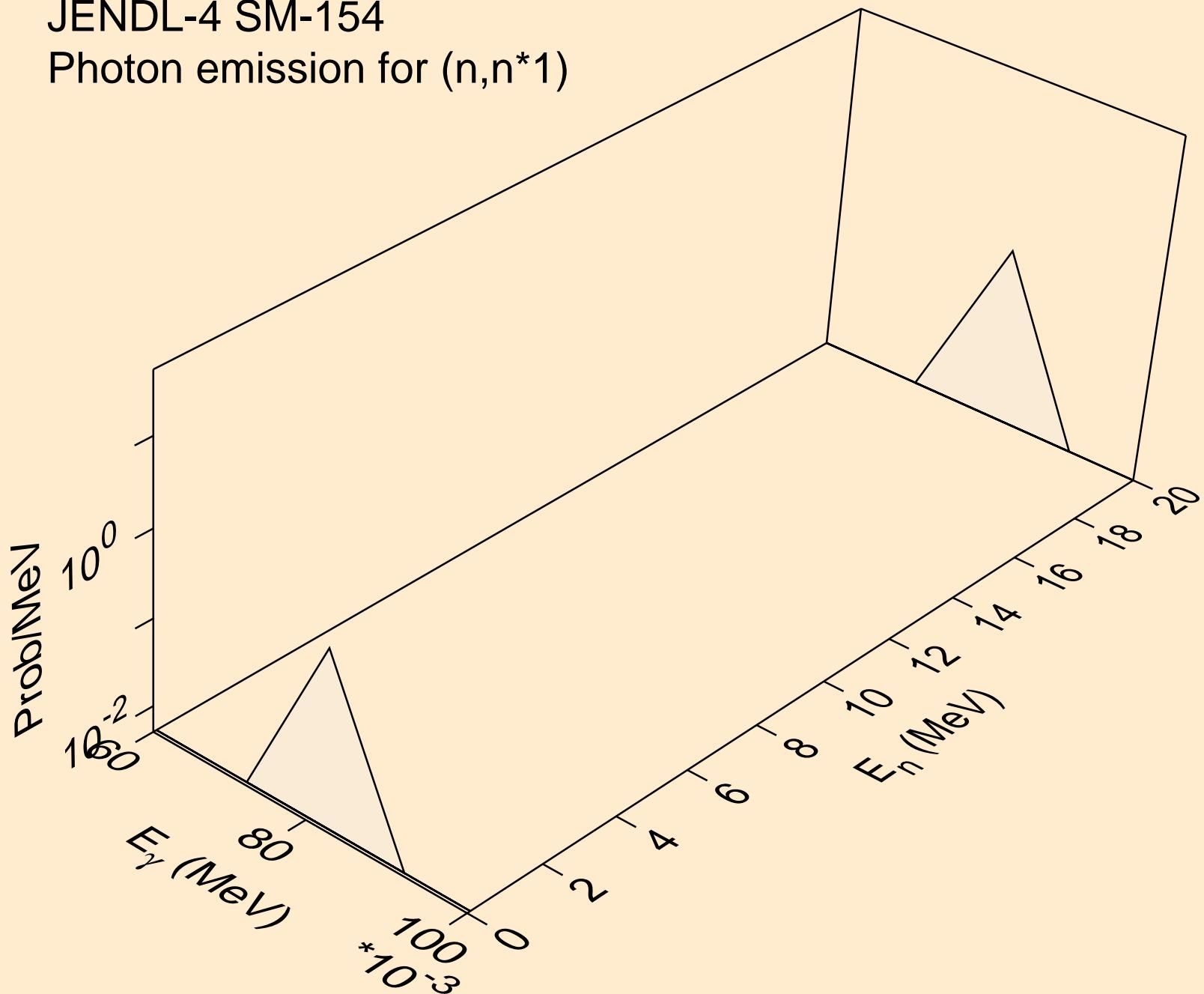
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Photon emission for  $(n,n^*)p$



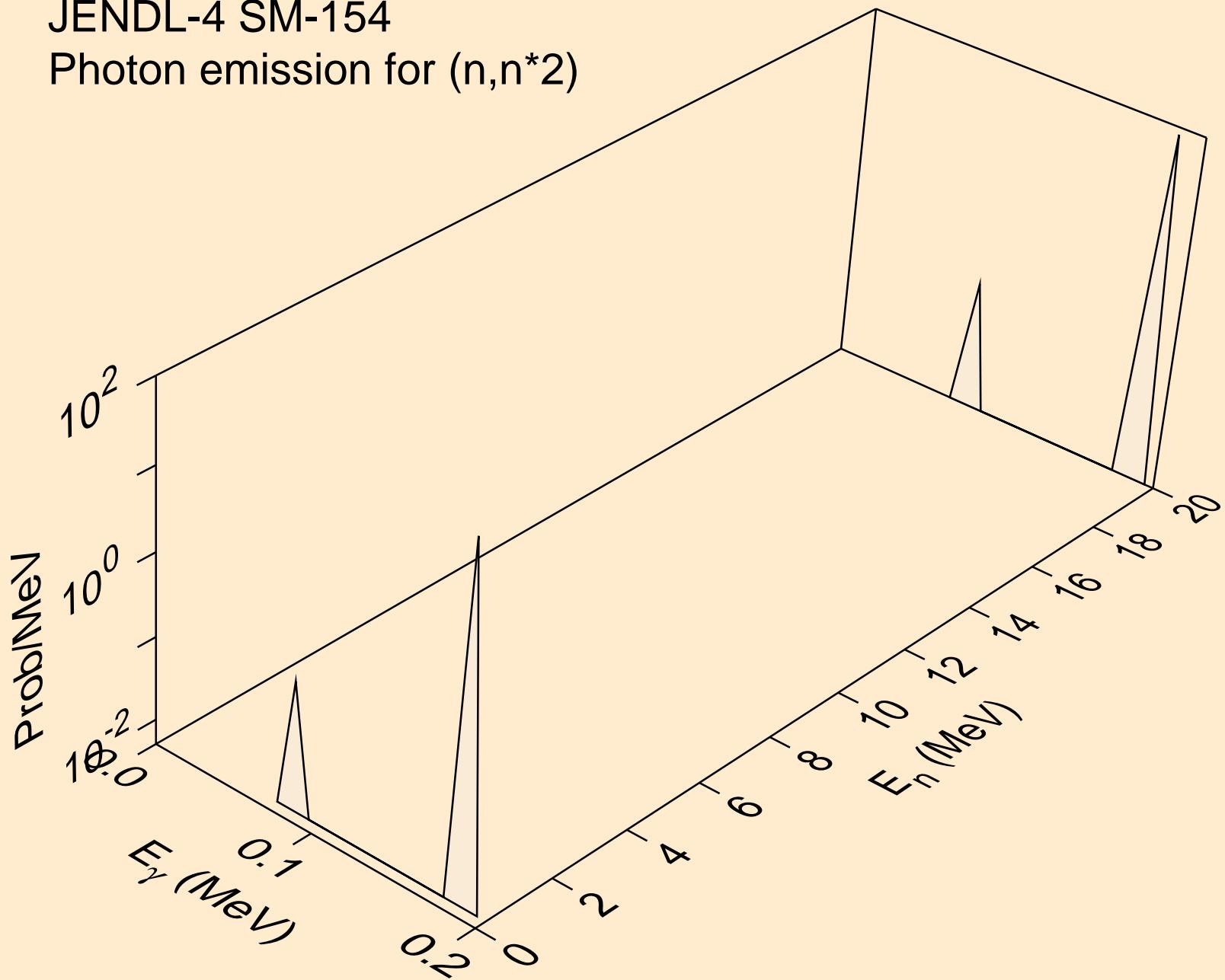
JENDL-4 SM-154  
Photon emission for  $(n,n^*)d$



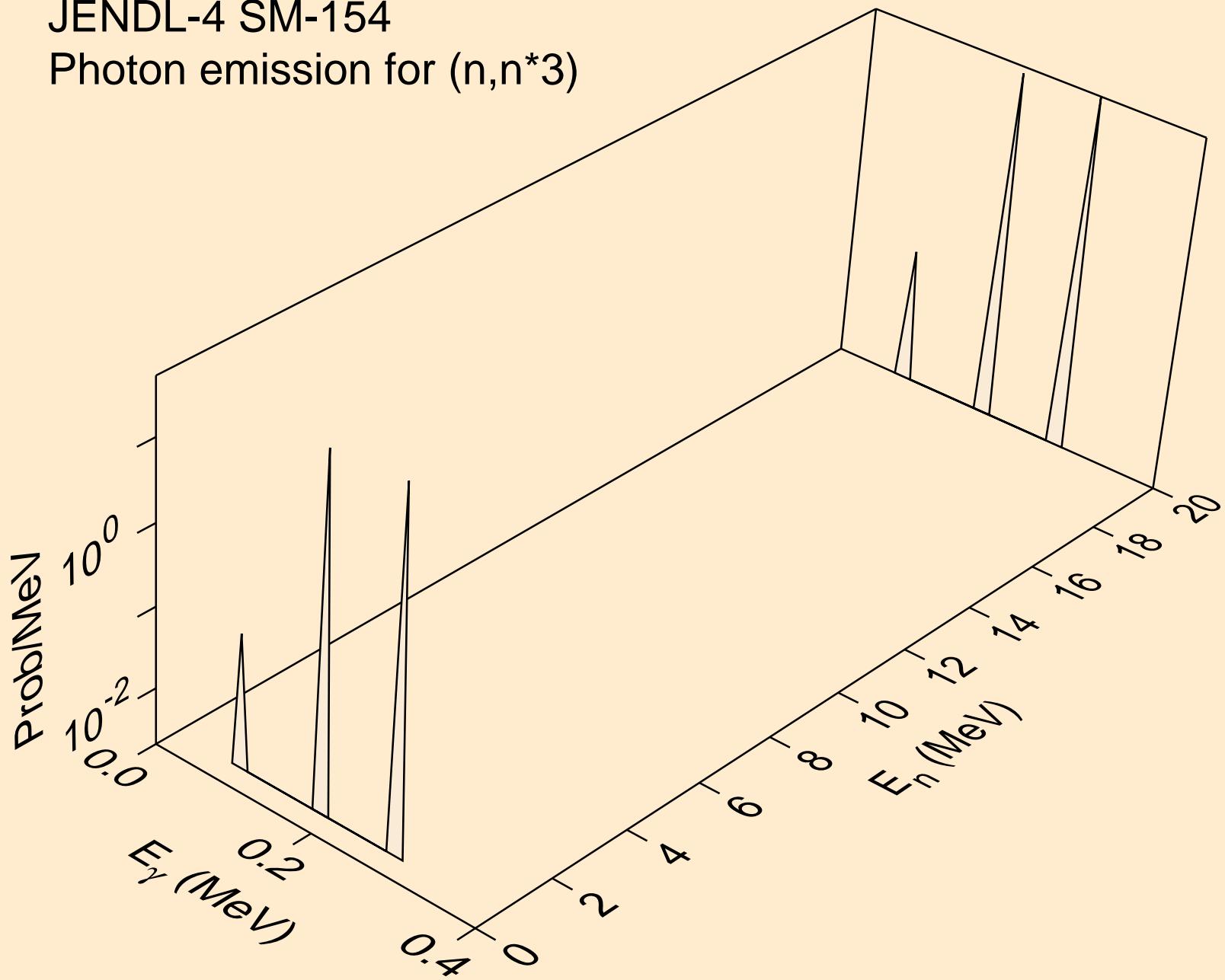
JENDL-4 SM-154  
Photon emission for (n,n\*1)



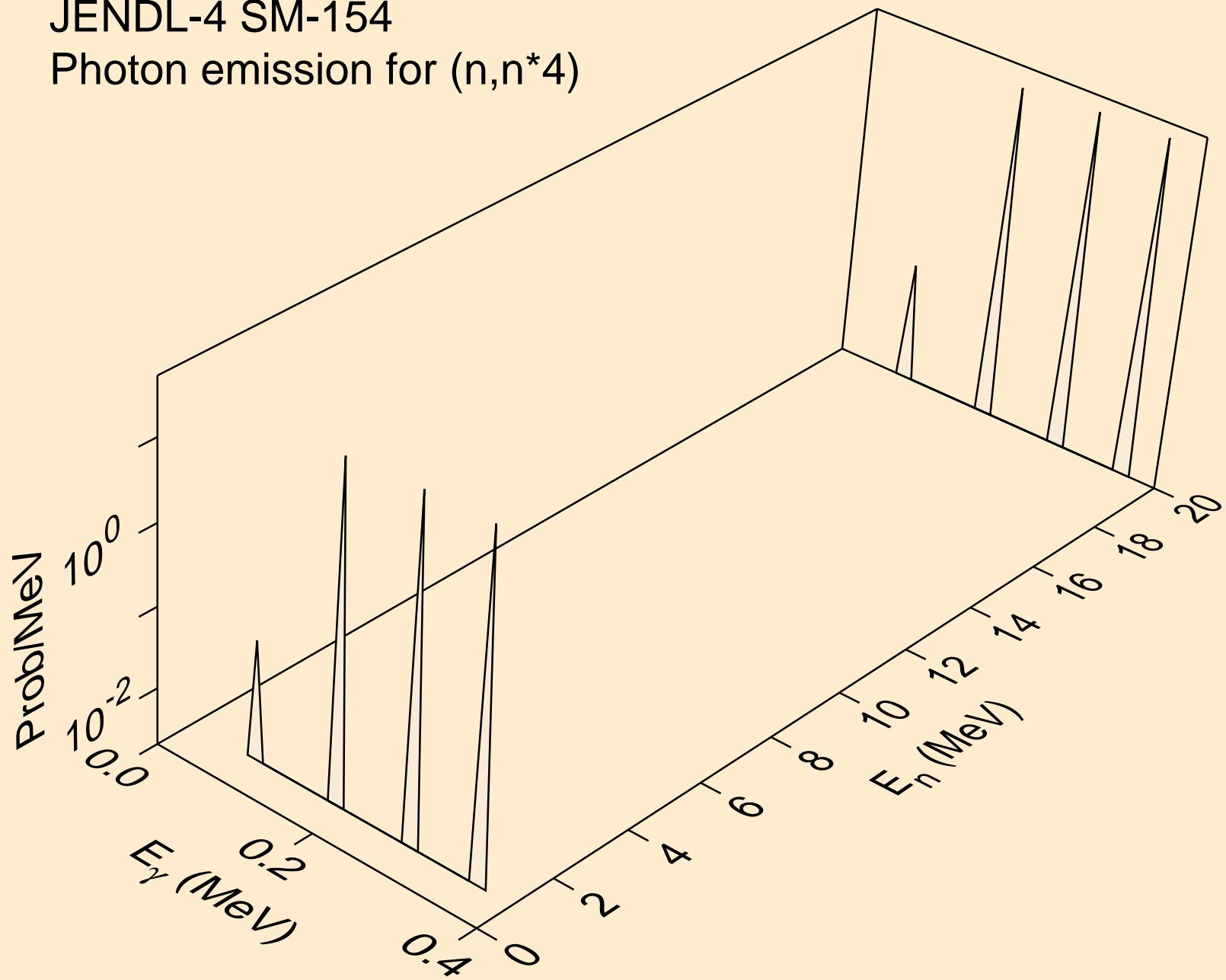
JENDL-4 SM-154  
Photon emission for (n,n\*2)



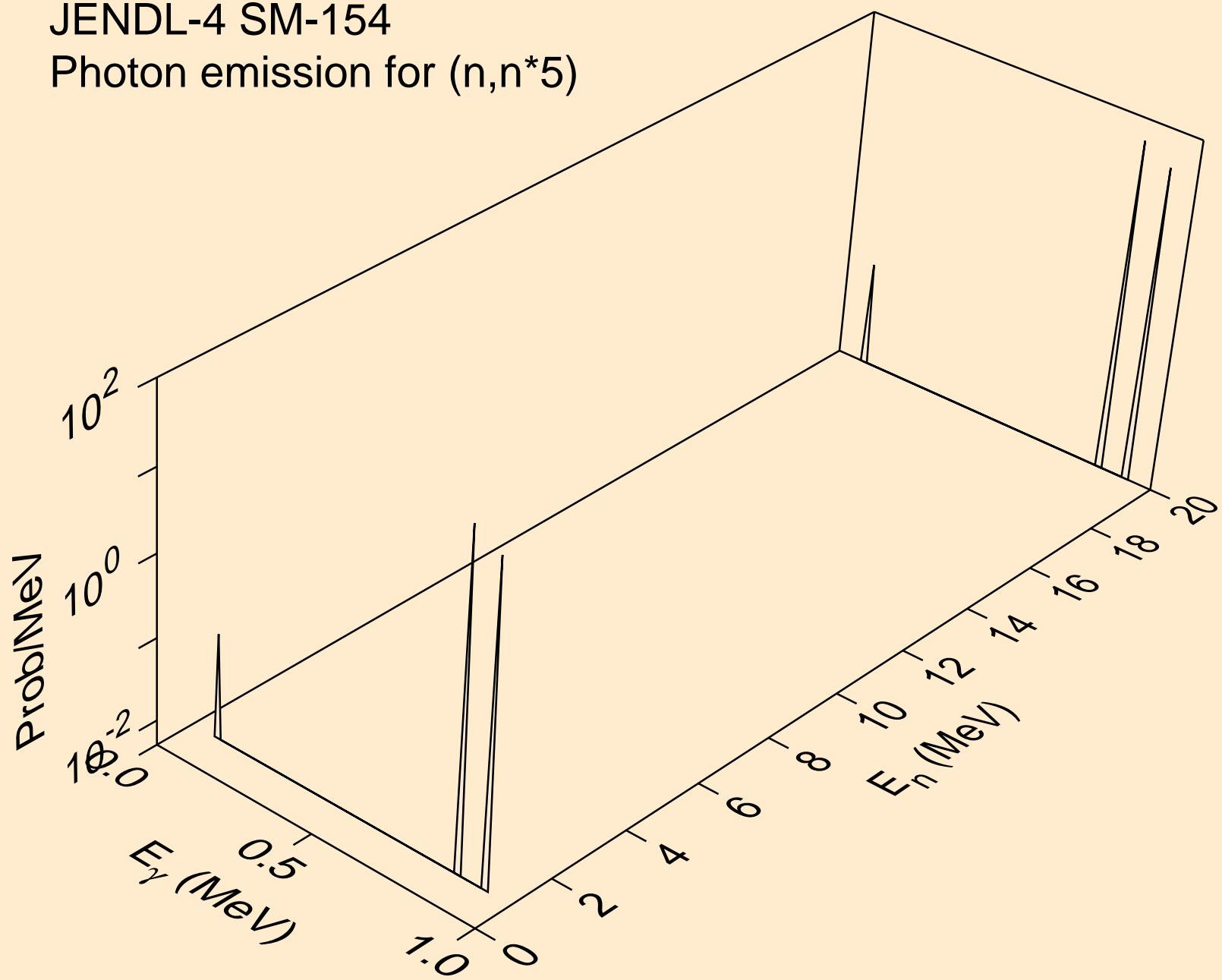
JENDL-4 SM-154  
Photon emission for (n,n\*3)



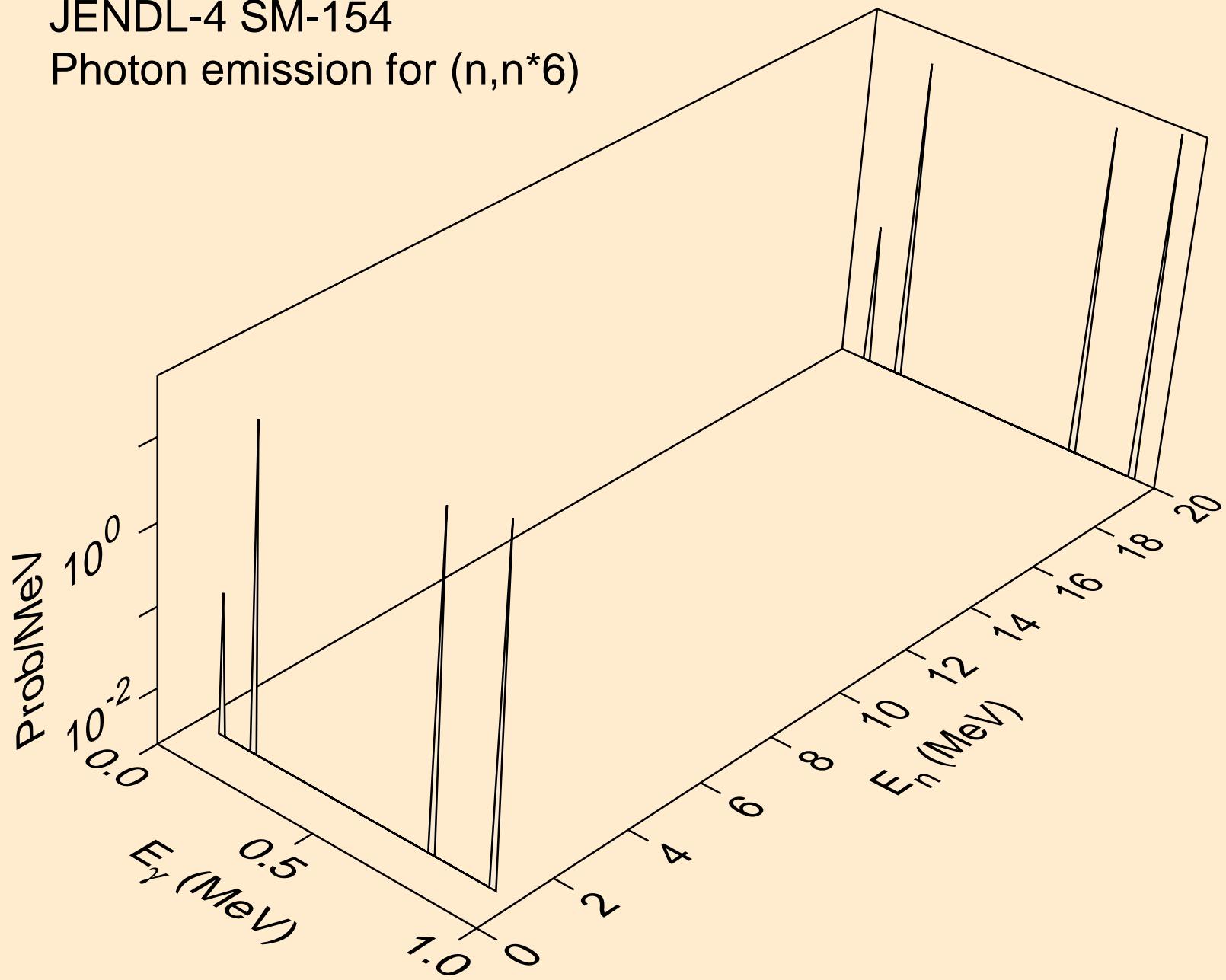
JENDL-4 SM-154  
Photon emission for ( $n, n^* 4$ )



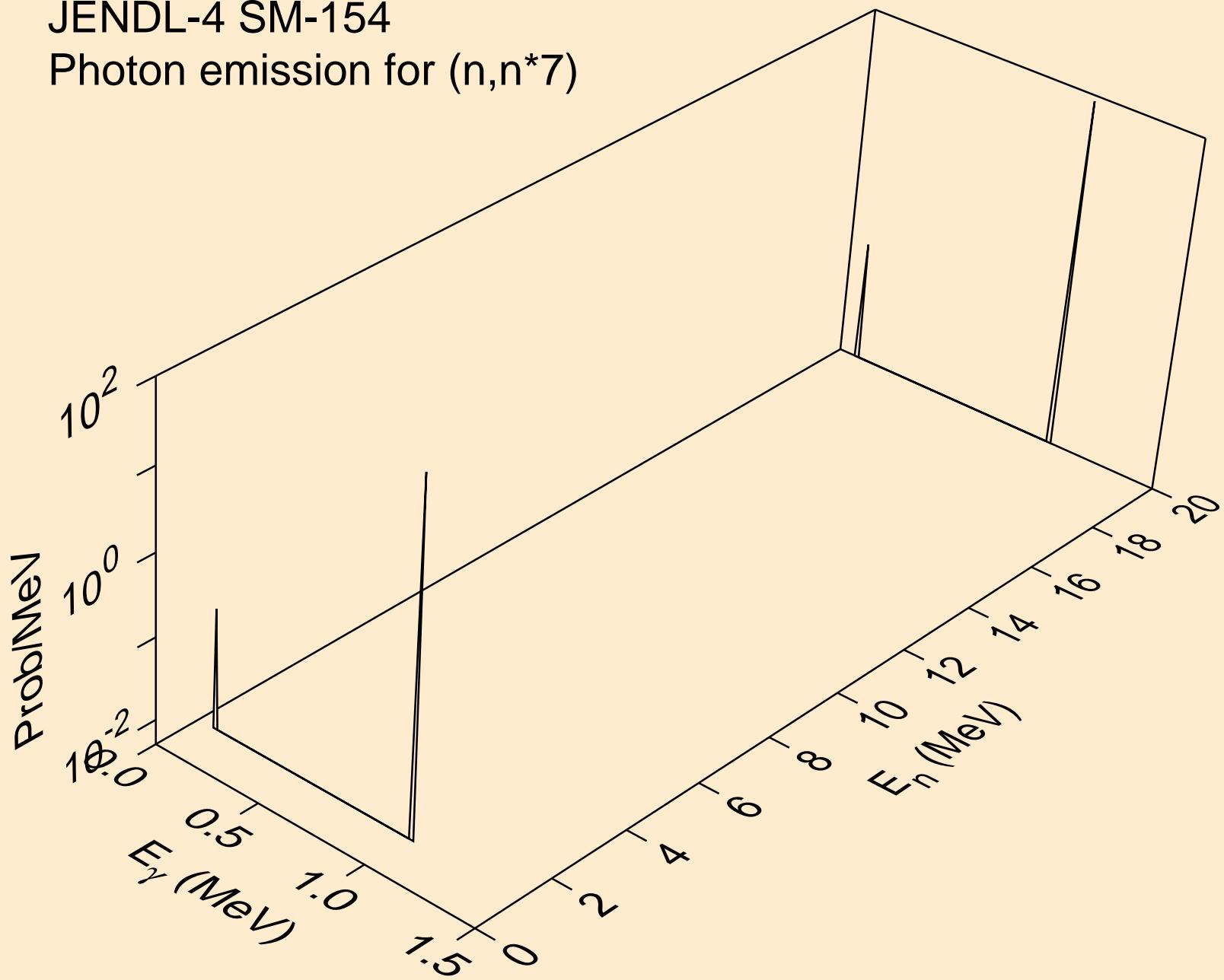
JENDL-4 SM-154  
Photon emission for (n,n\*5)



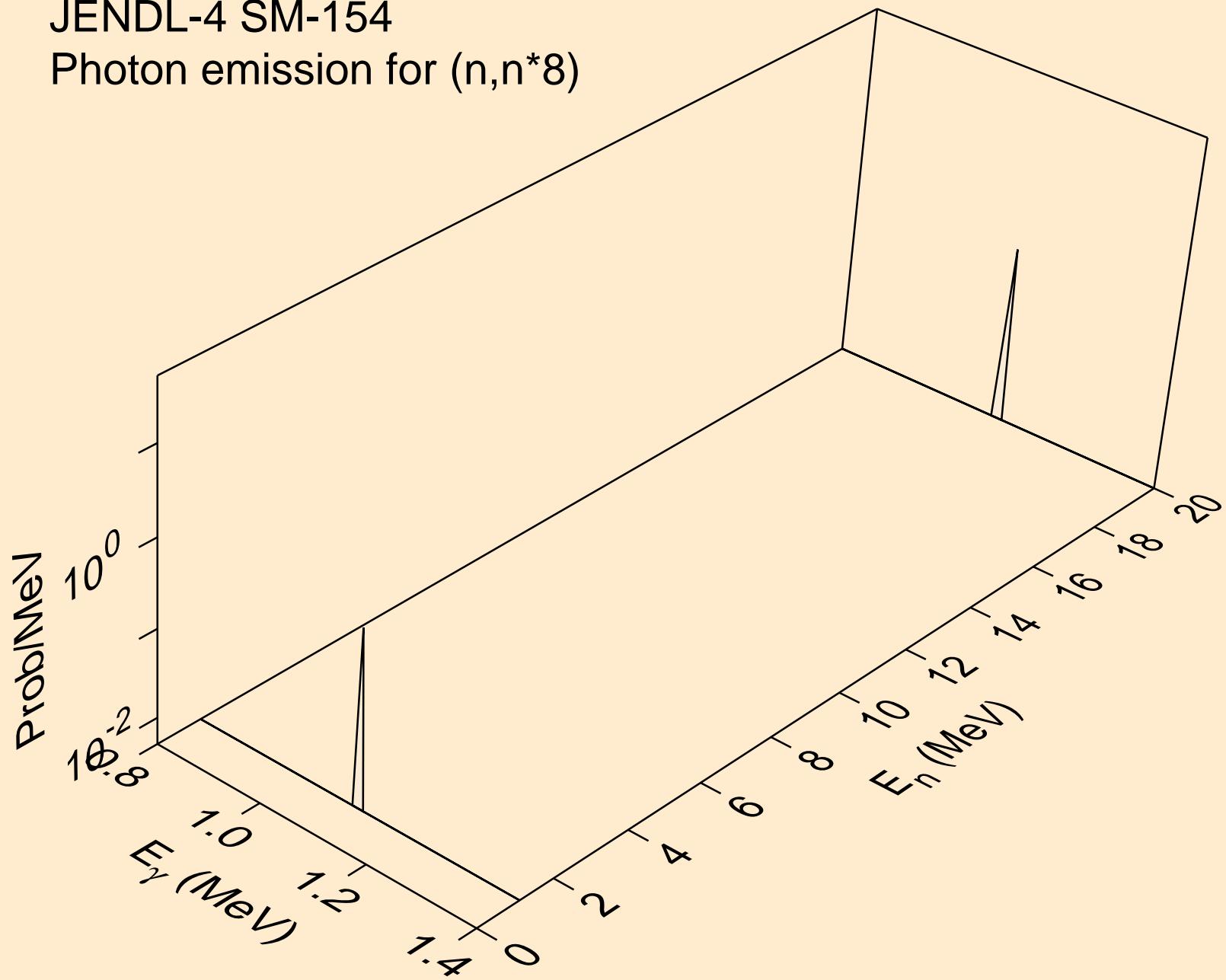
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Photon emission for (n,n\*6)



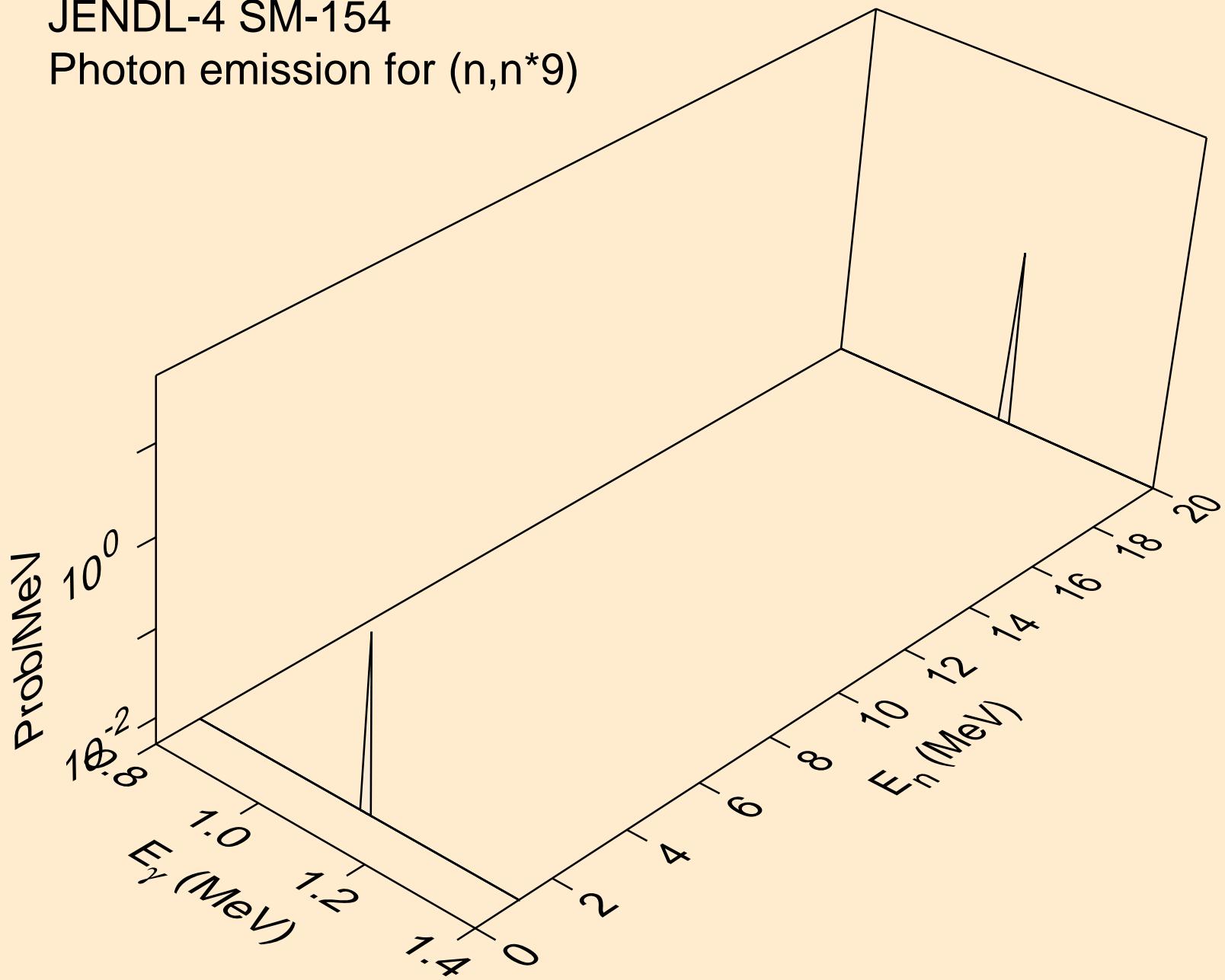
JENDL-4 SM-154  
Photon emission for (n,n\*7)



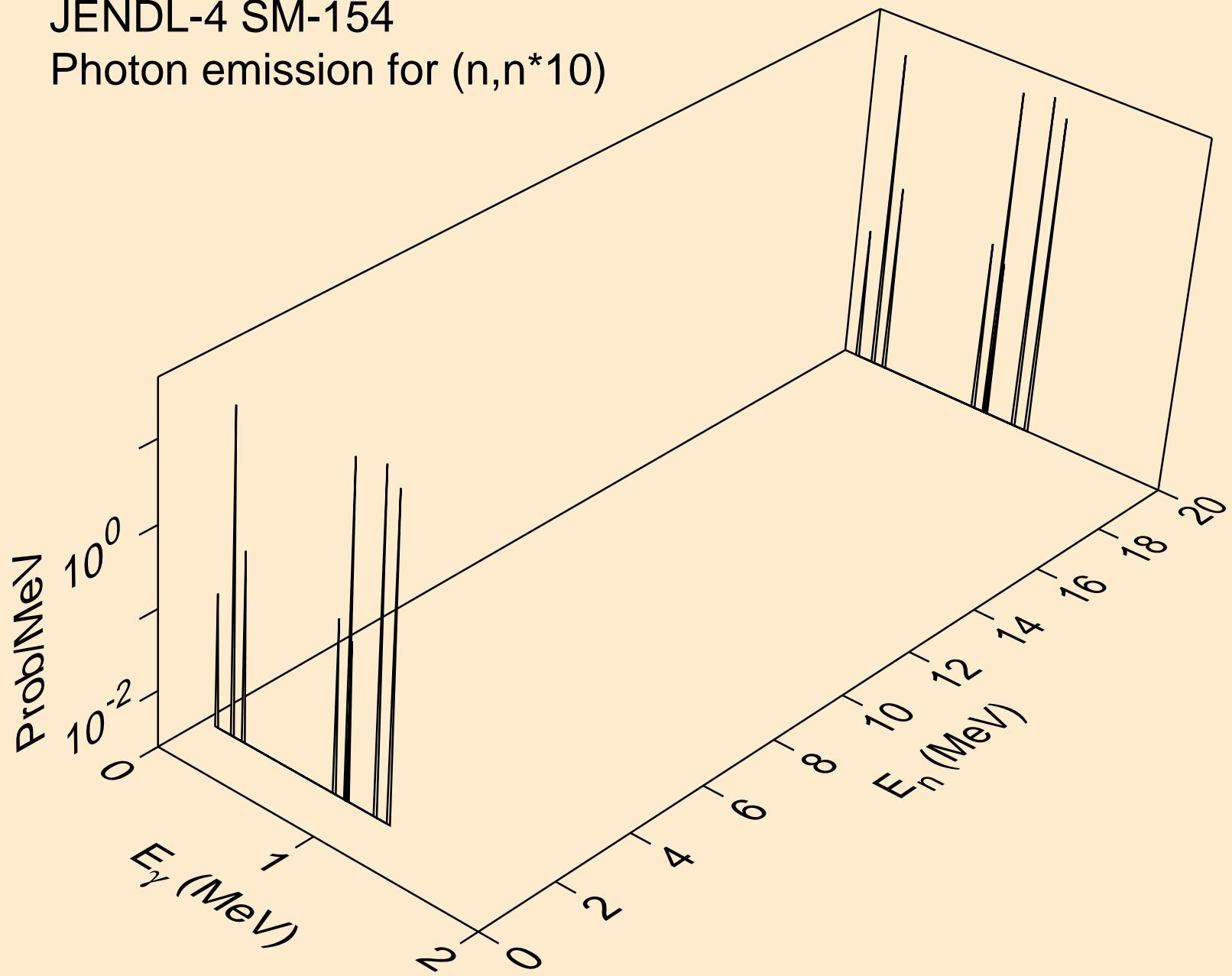
JENDL-4 SM-154  
Photon emission for (n,n\*8)



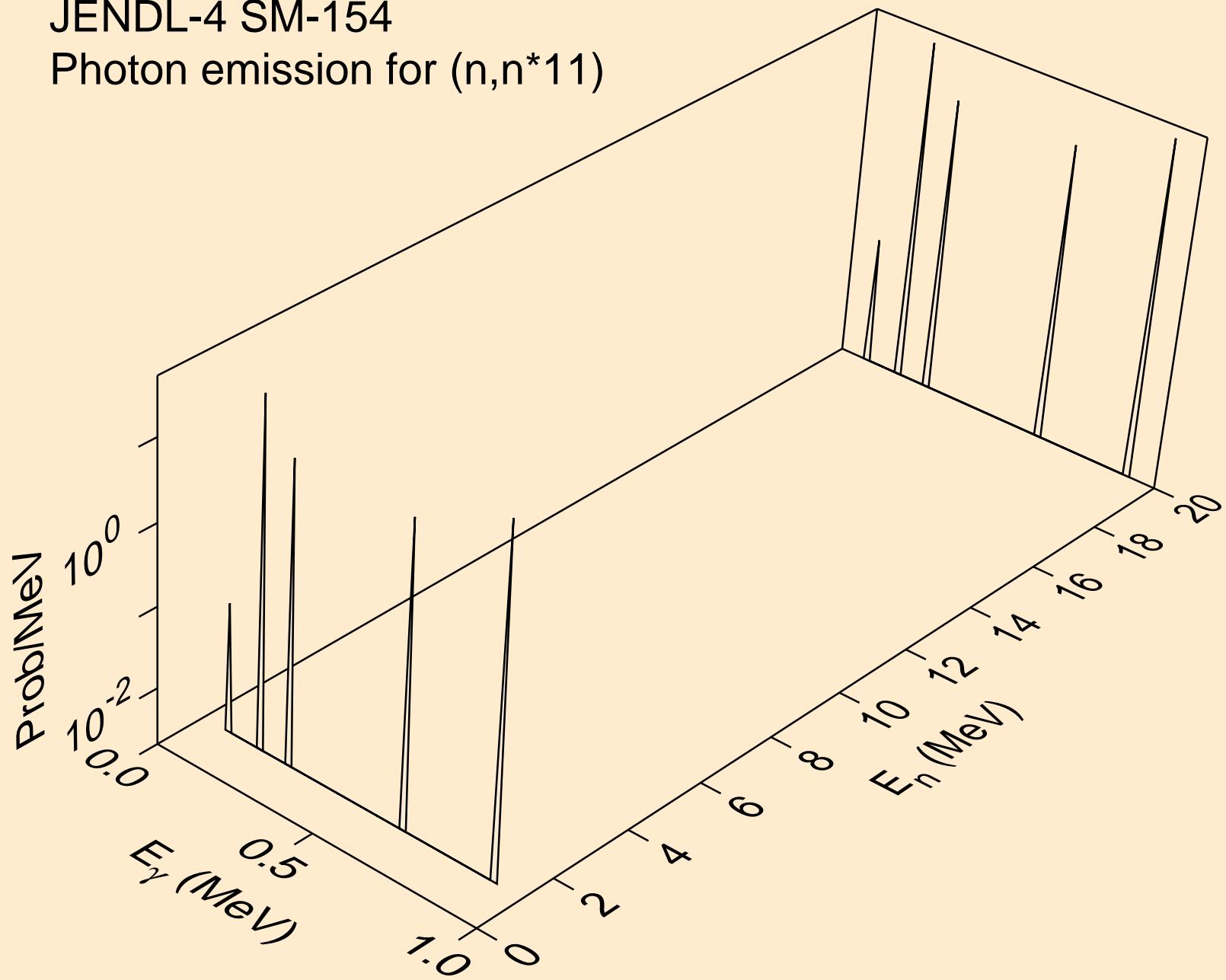
JENDL-4 SM-154  
Photon emission for (n,n\*9)



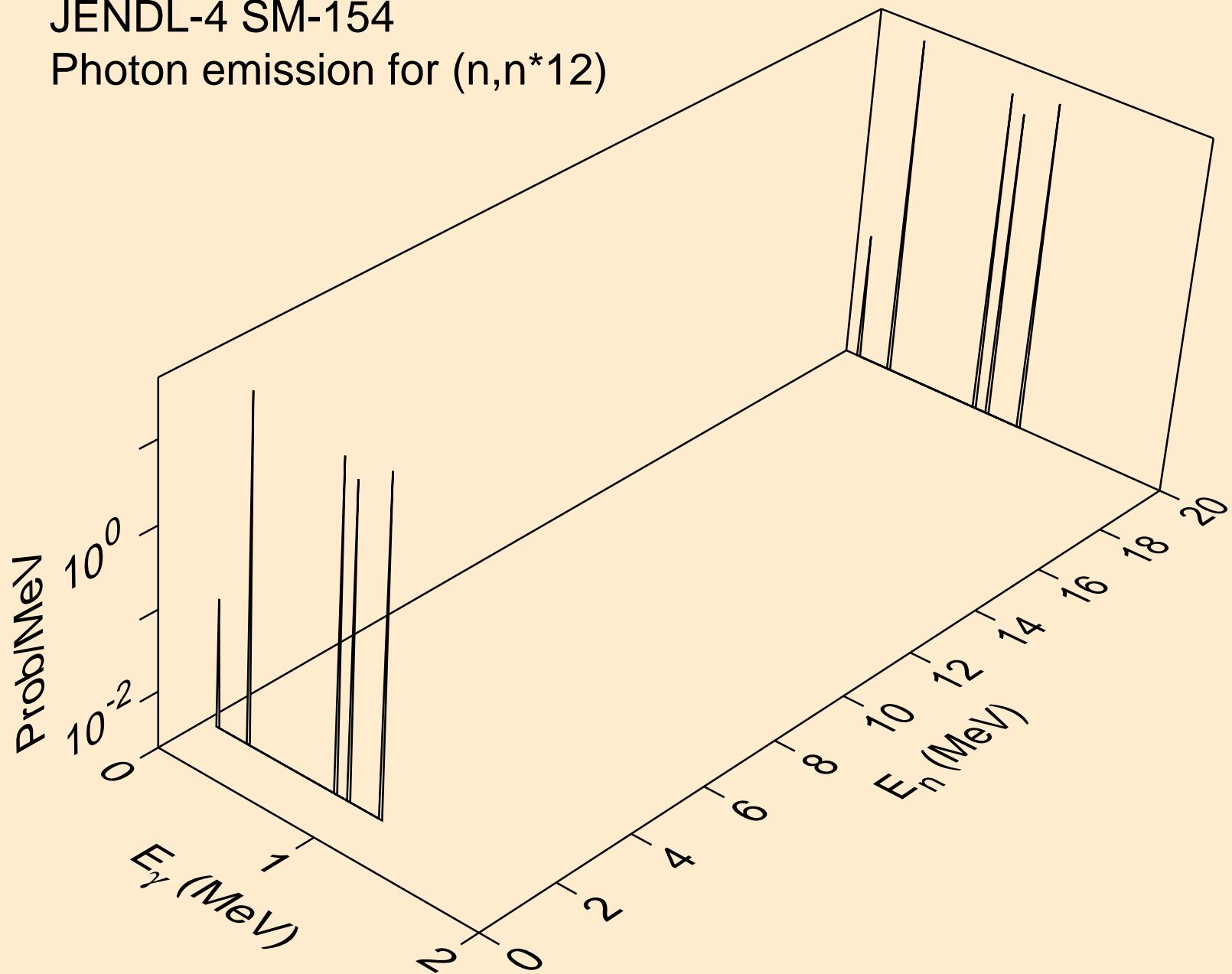
JENDL-4 SM-154  
Photon emission for (n,n\*10)



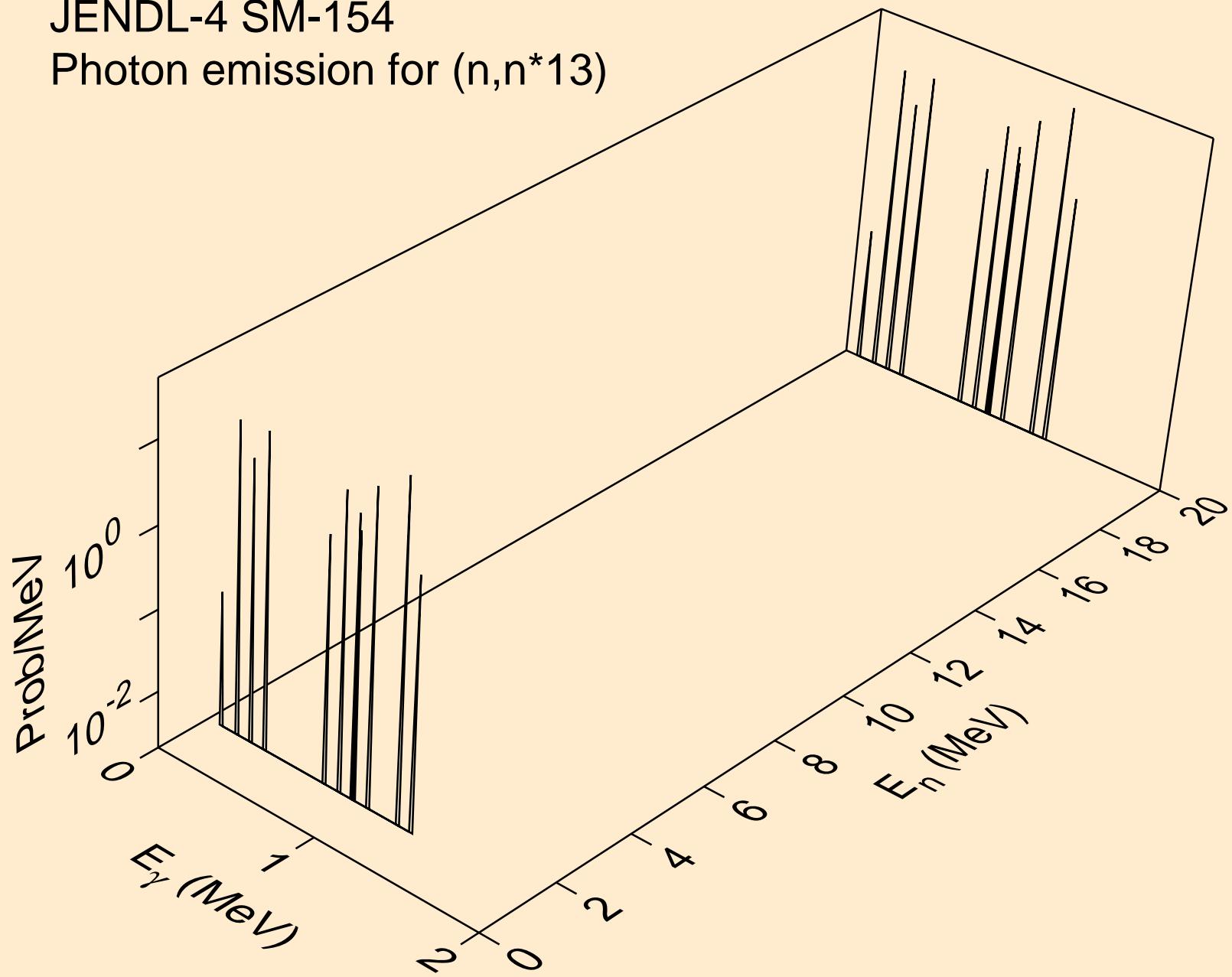
JENDL-4 SM-154  
Photon emission for (n,n\*11)



JENDL-4 SM-154  
Photon emission for (n,n\*12)

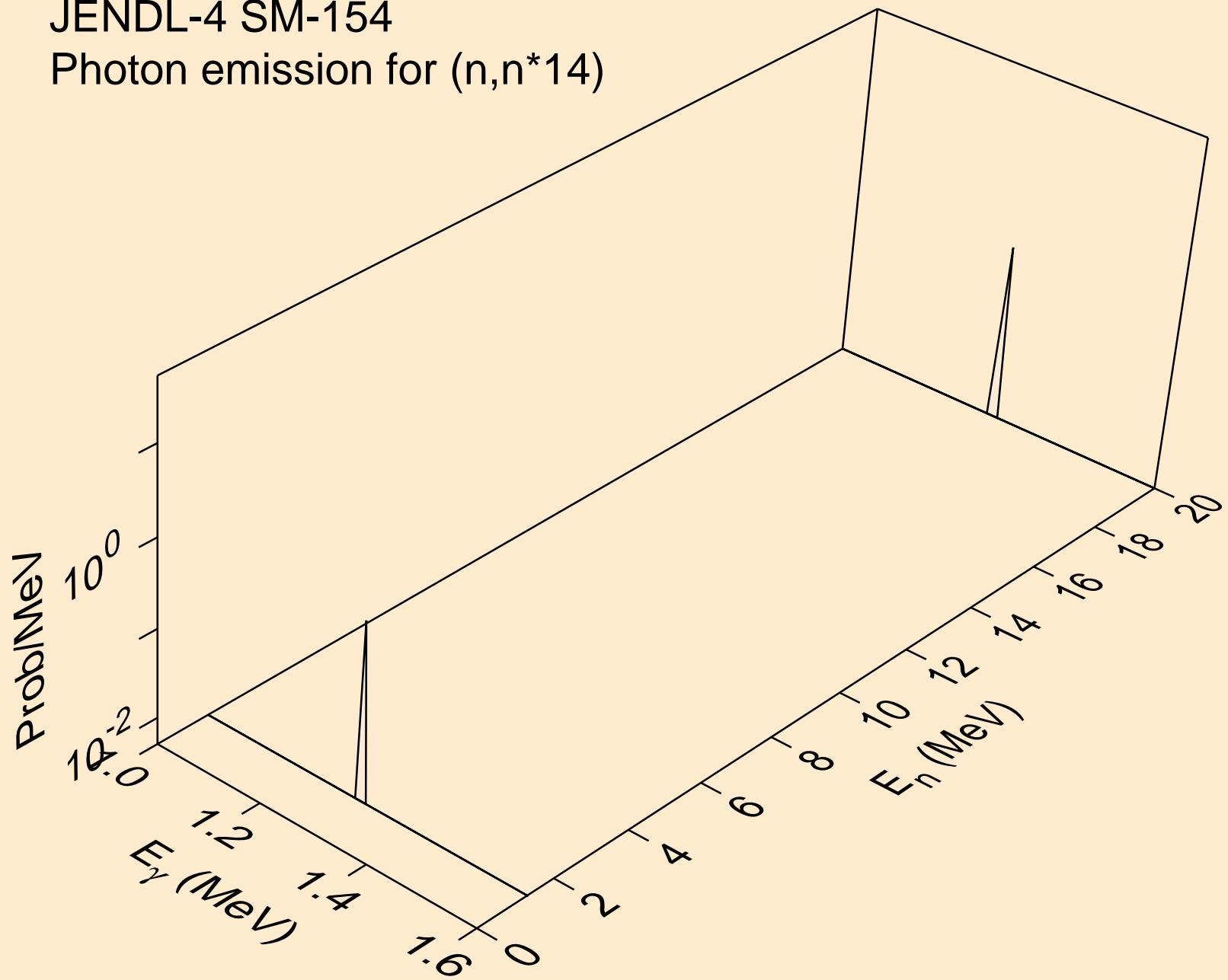


JENDL-4 SM-154  
Photon emission for (n,n\*13)

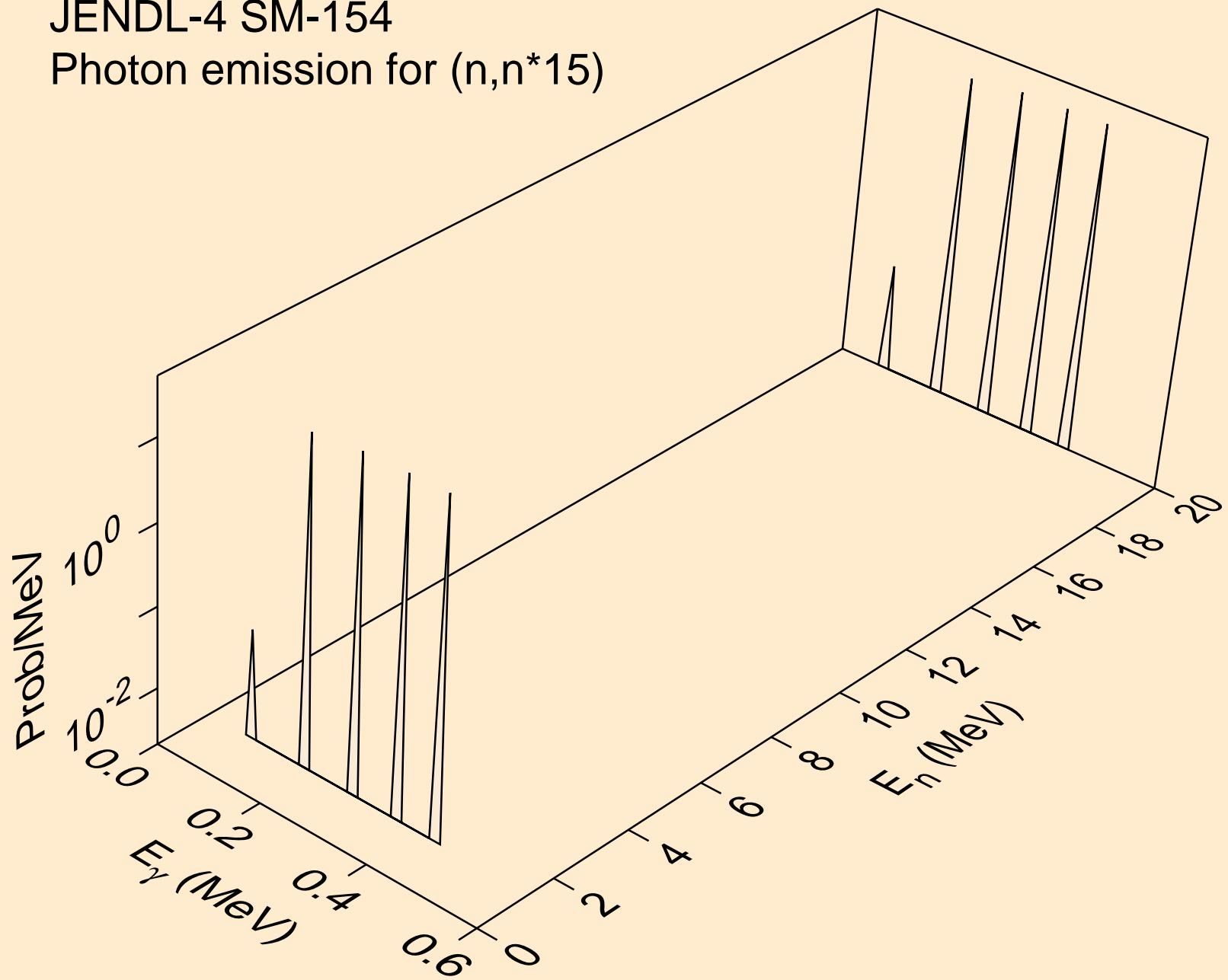


JENDL-4 SM-154

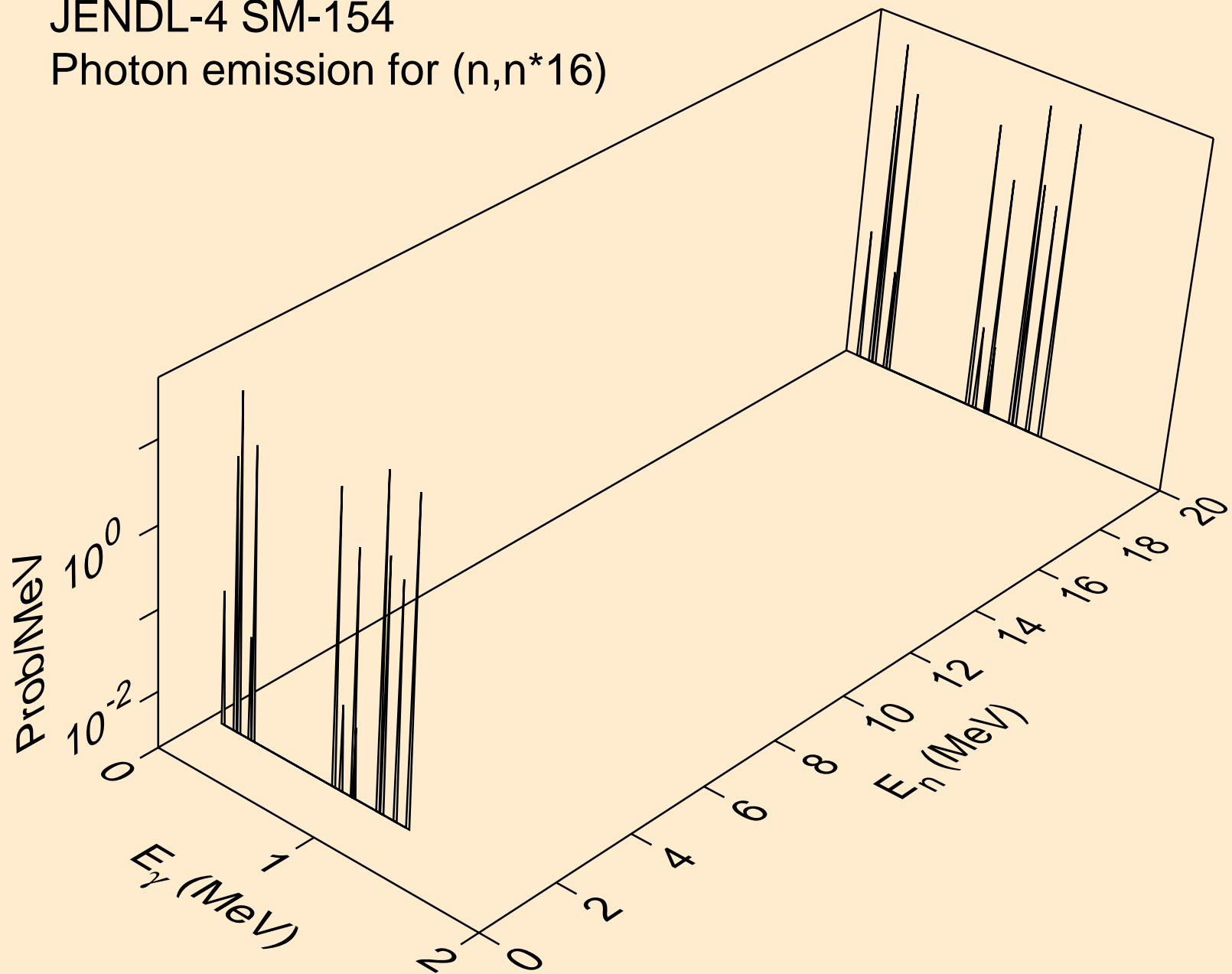
Photon emission for  $(n,n^*14)$



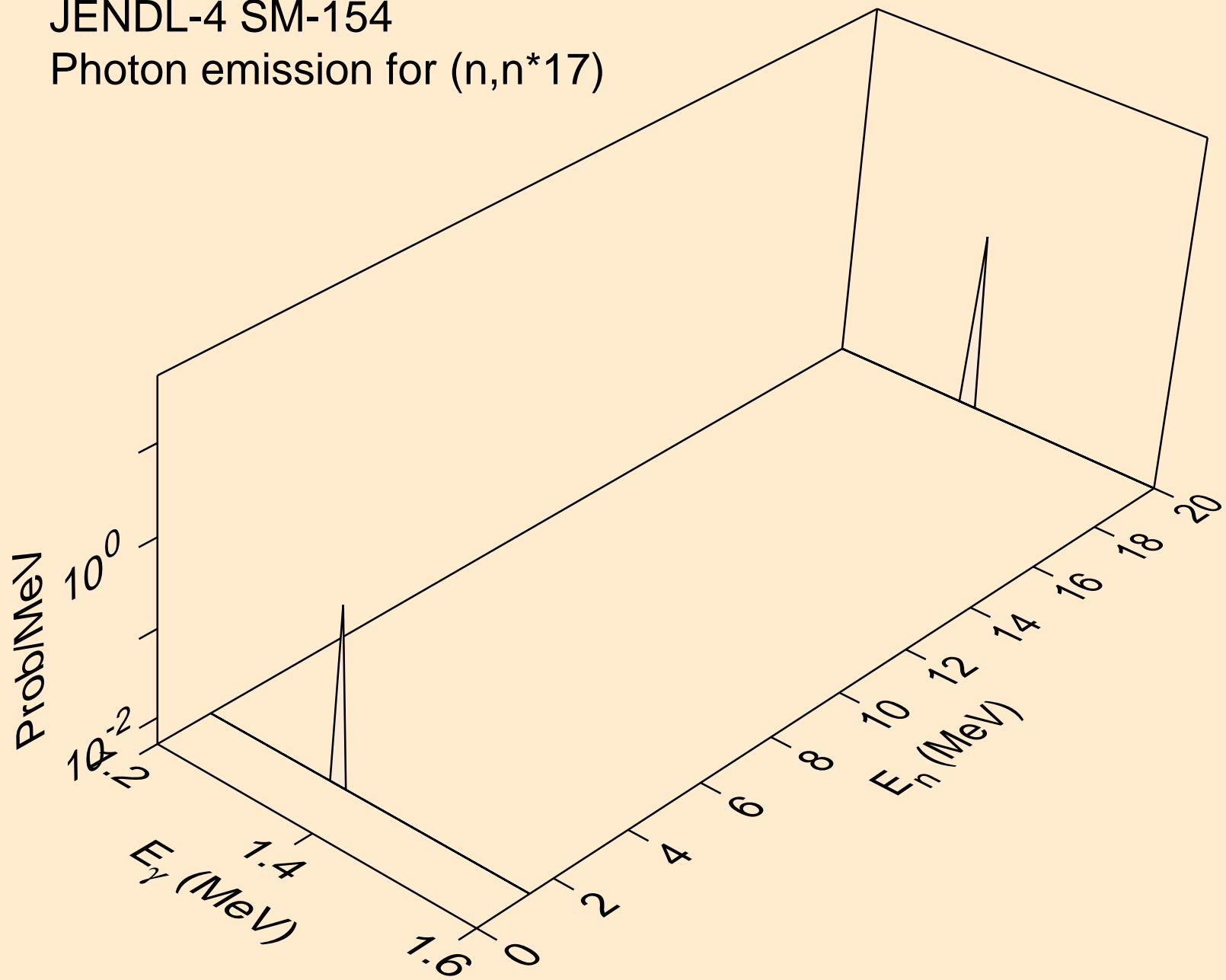
JENDL-4 SM-154  
Photon emission for ( $n, n^* 15$ )



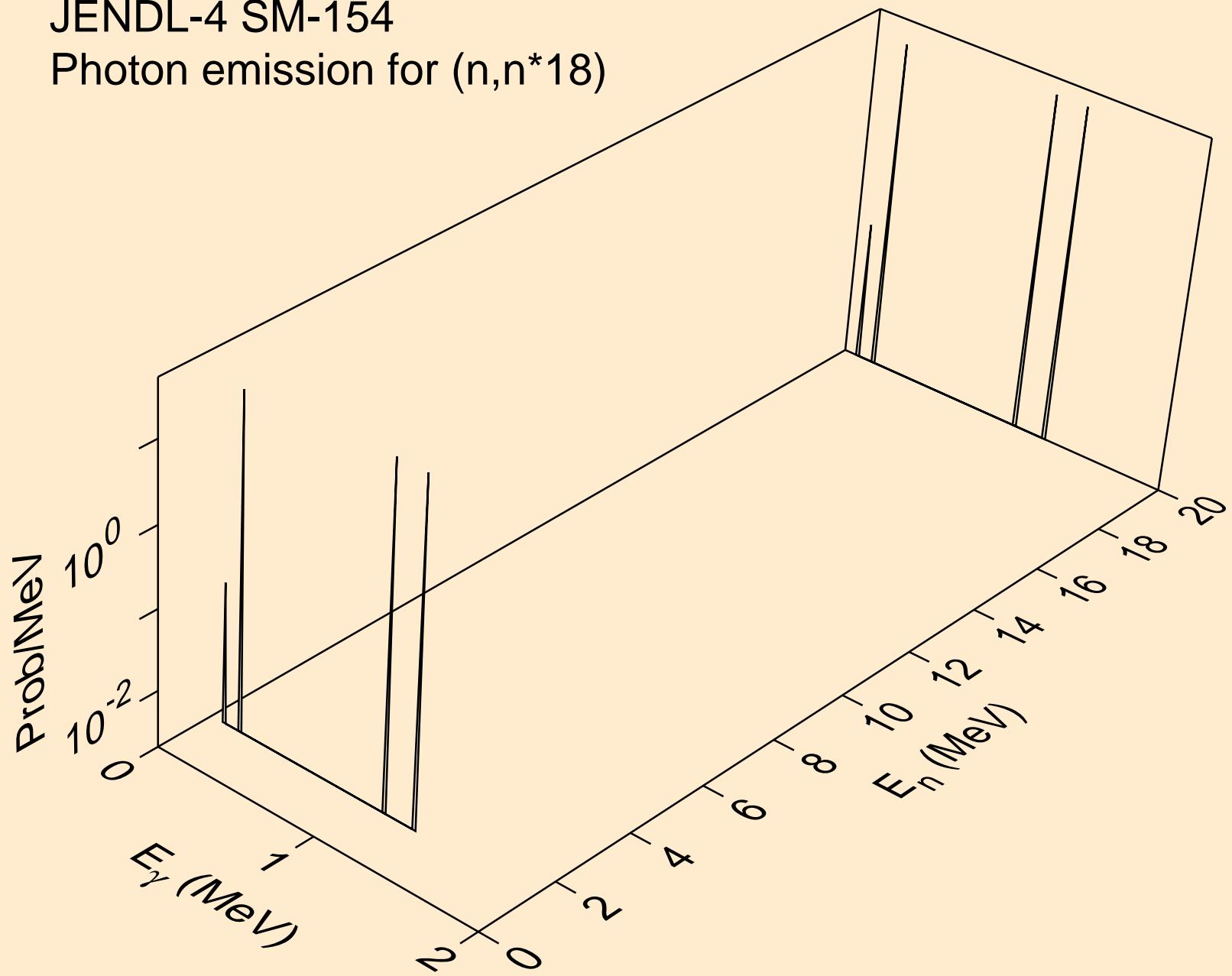
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Photon emission for  $(n,n^*16)$



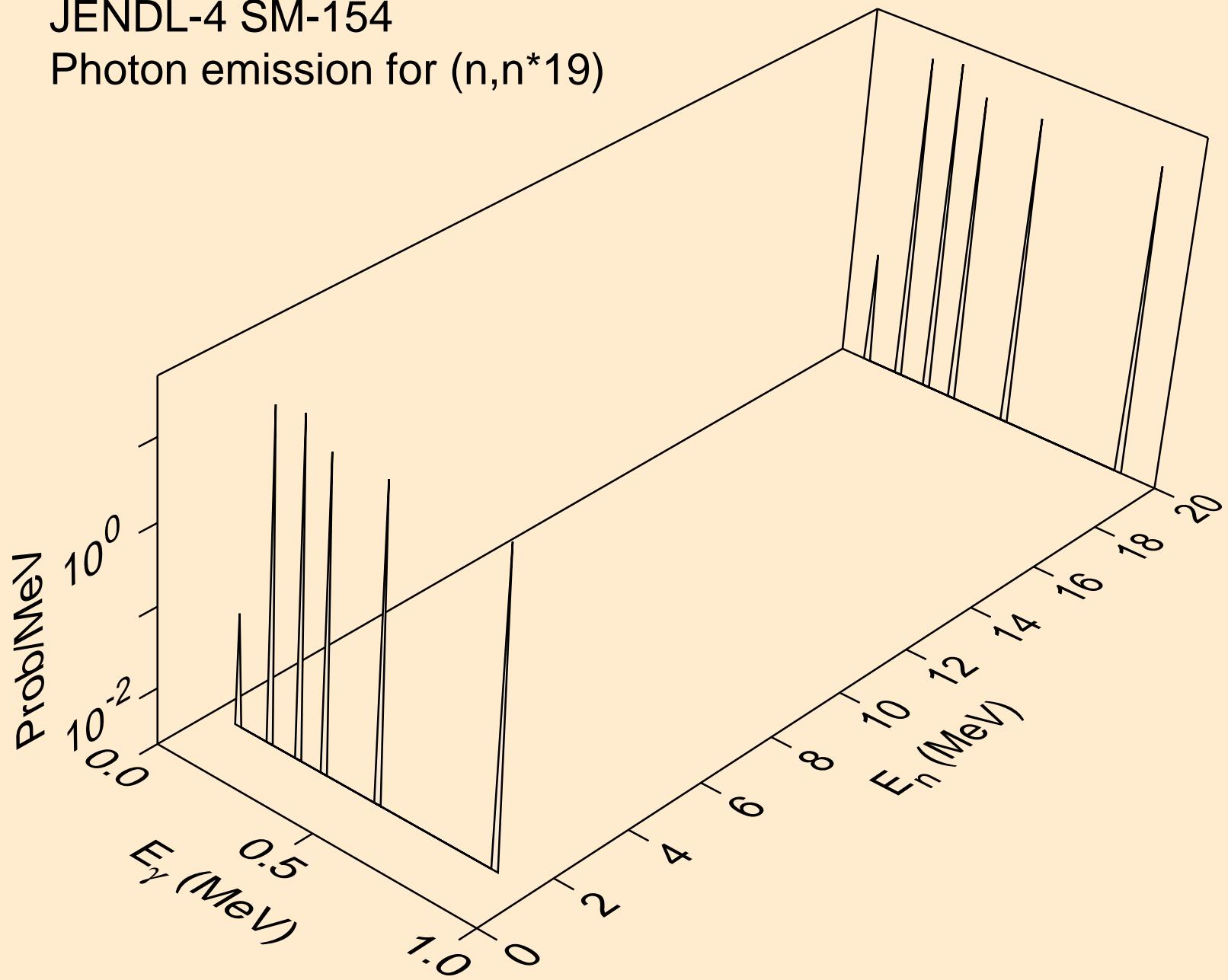
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Photon emission for (n,n\*17)



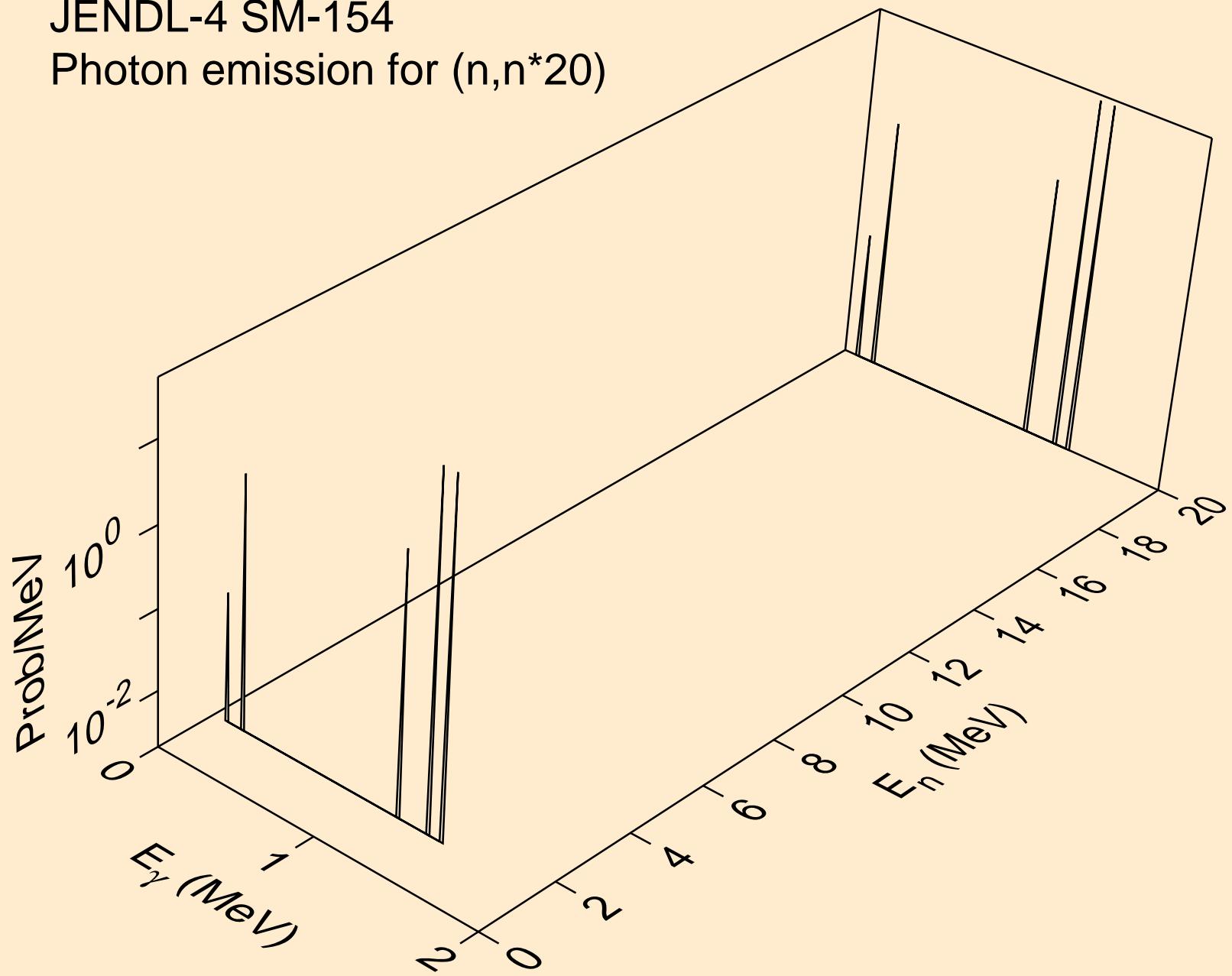
JENDL-4 SM-154  
Photon emission for (n,n\*18)



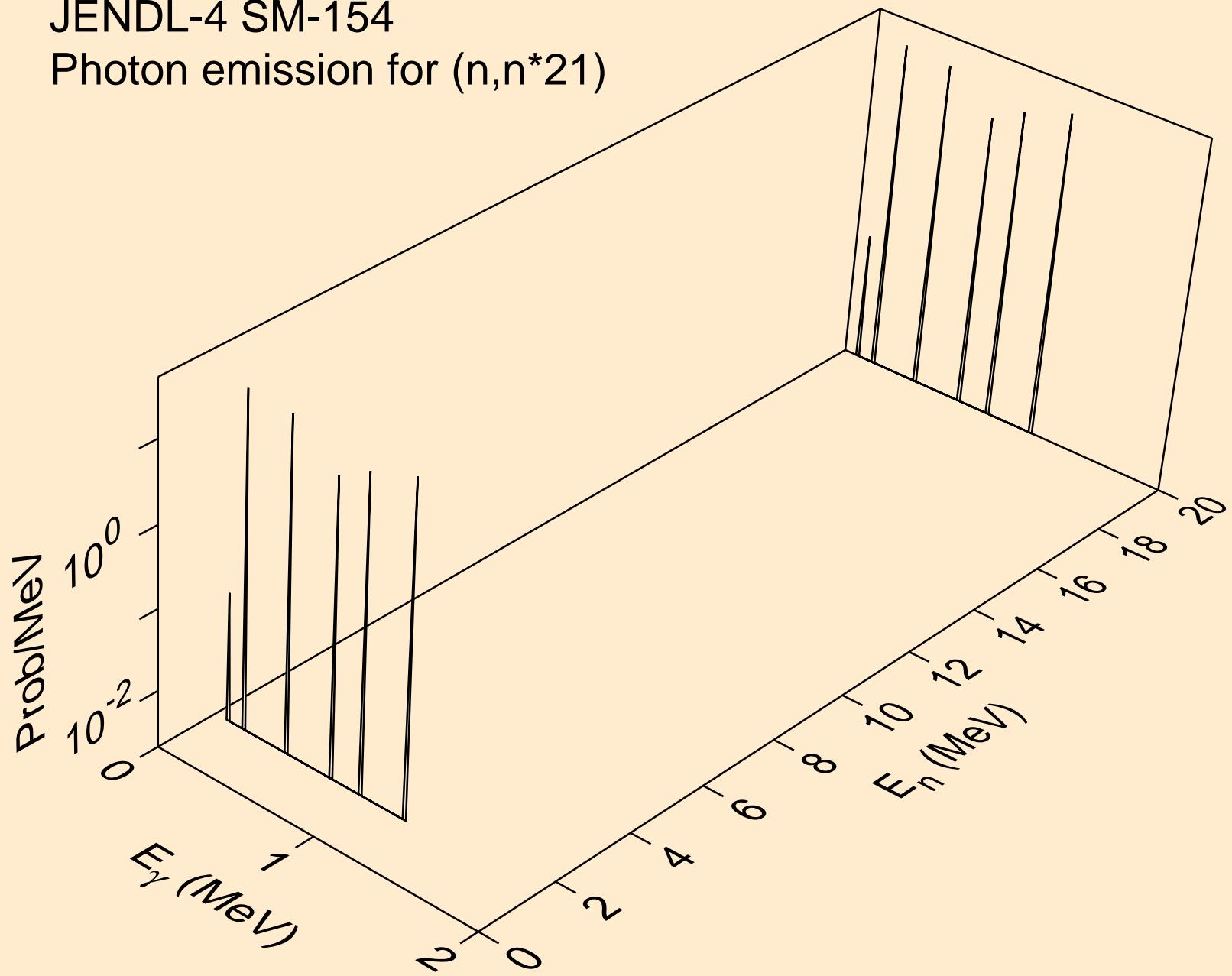
JENDL-4 SM-154  
Photon emission for (n,n\*19)



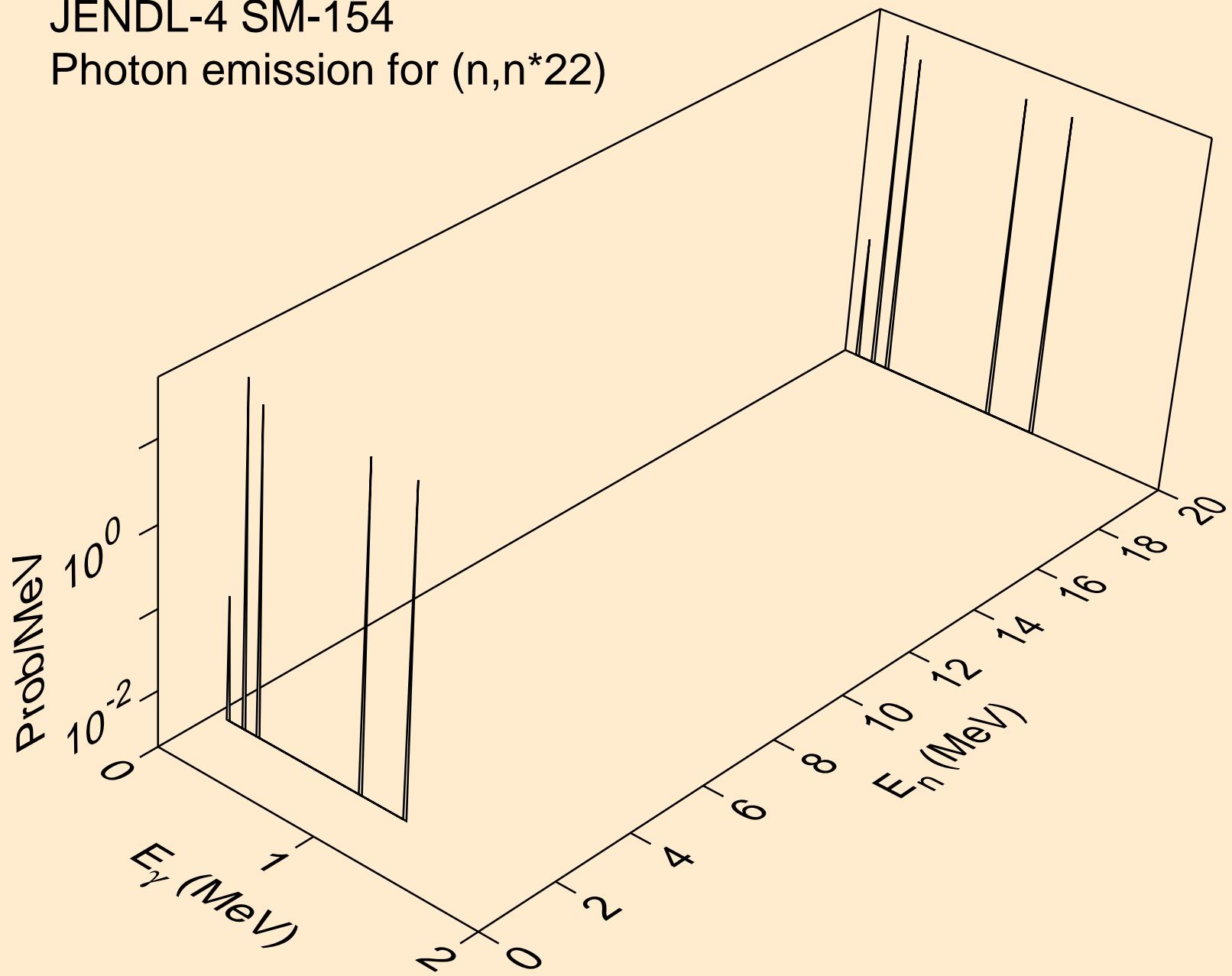
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Photon emission for ( $n, n^* 20$ )



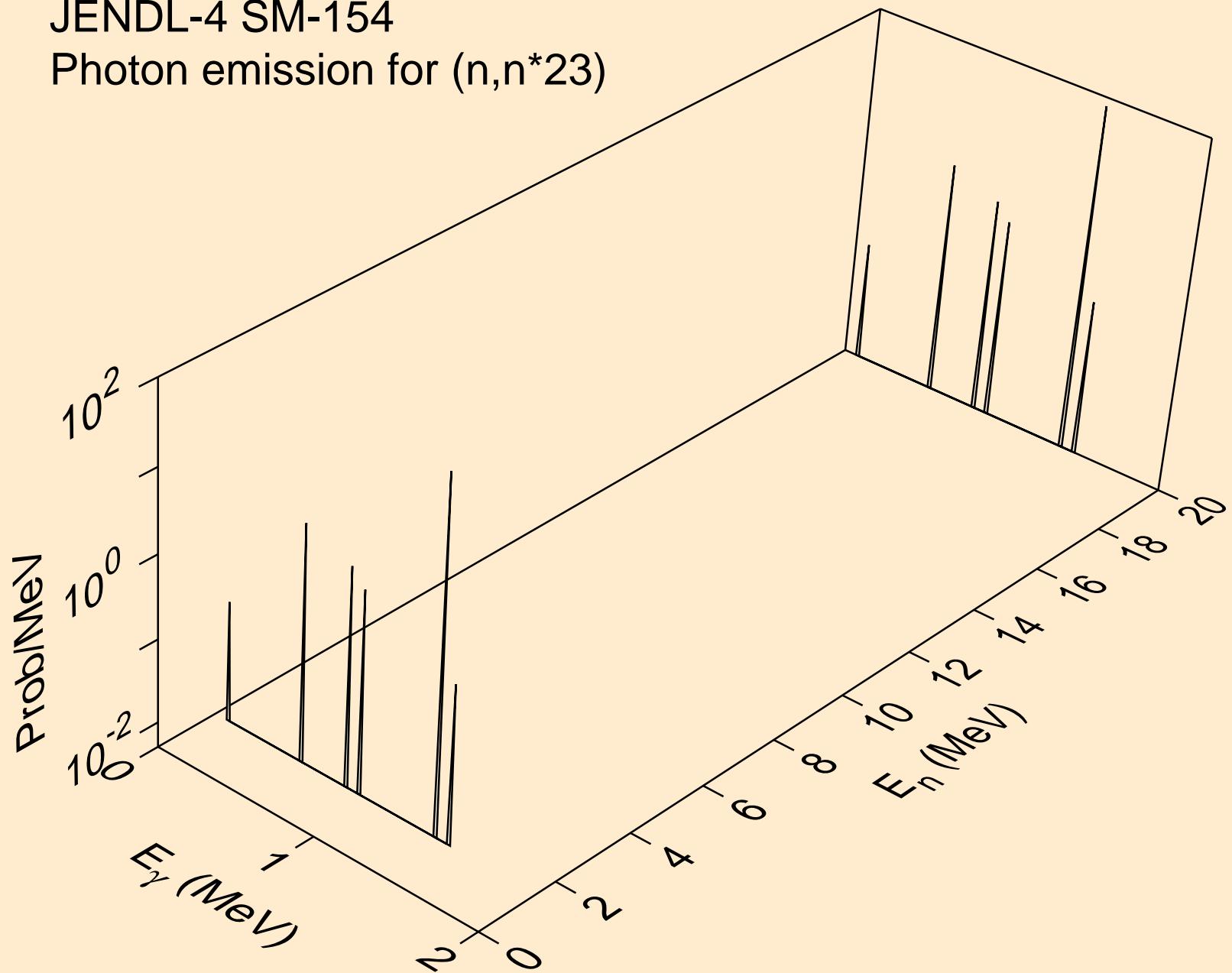
JENDL-4 SM-154  
Photon emission for (n,n\*21)



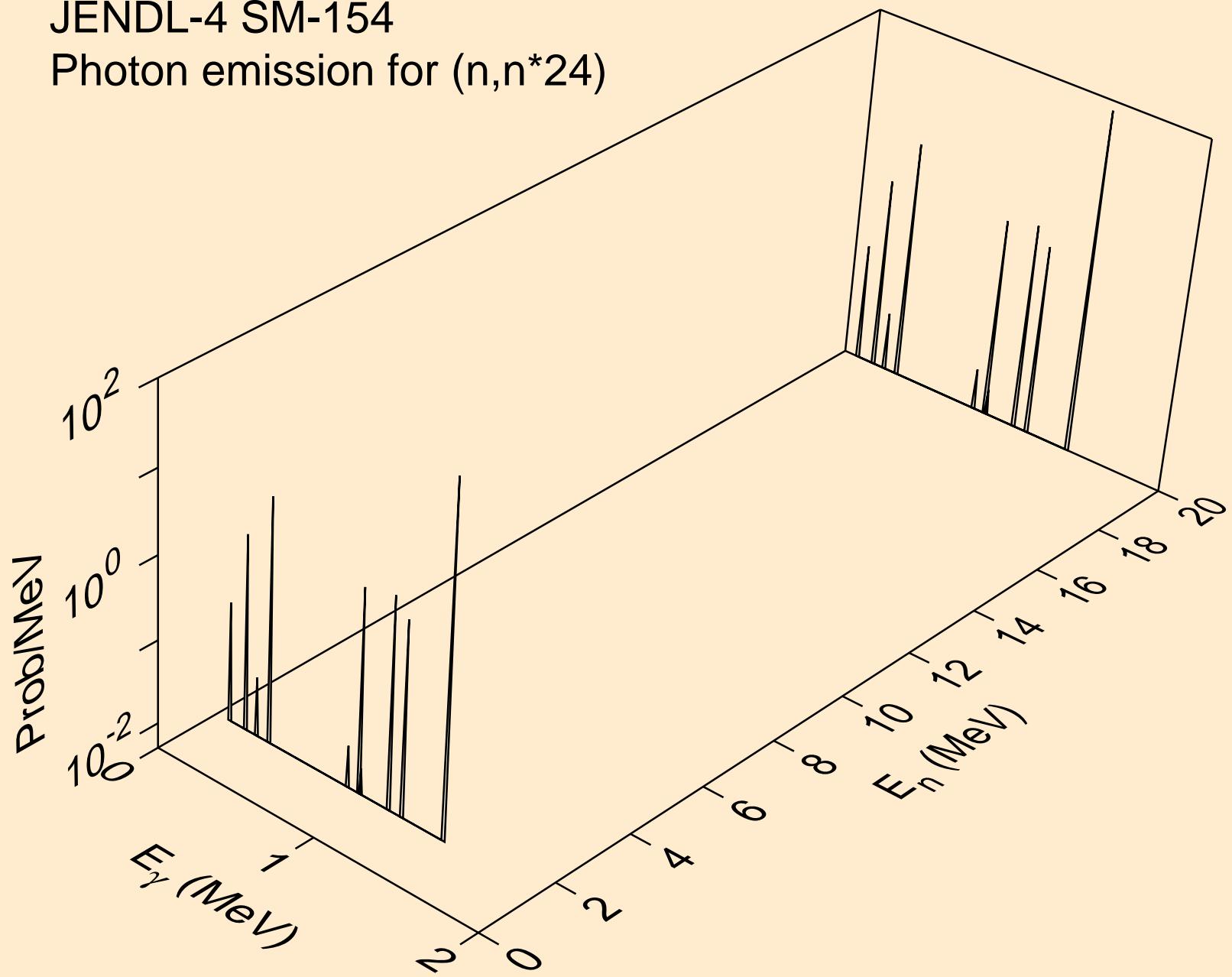
JENDL-4 SM-154  
Photon emission for ( $n, n^* 22$ )



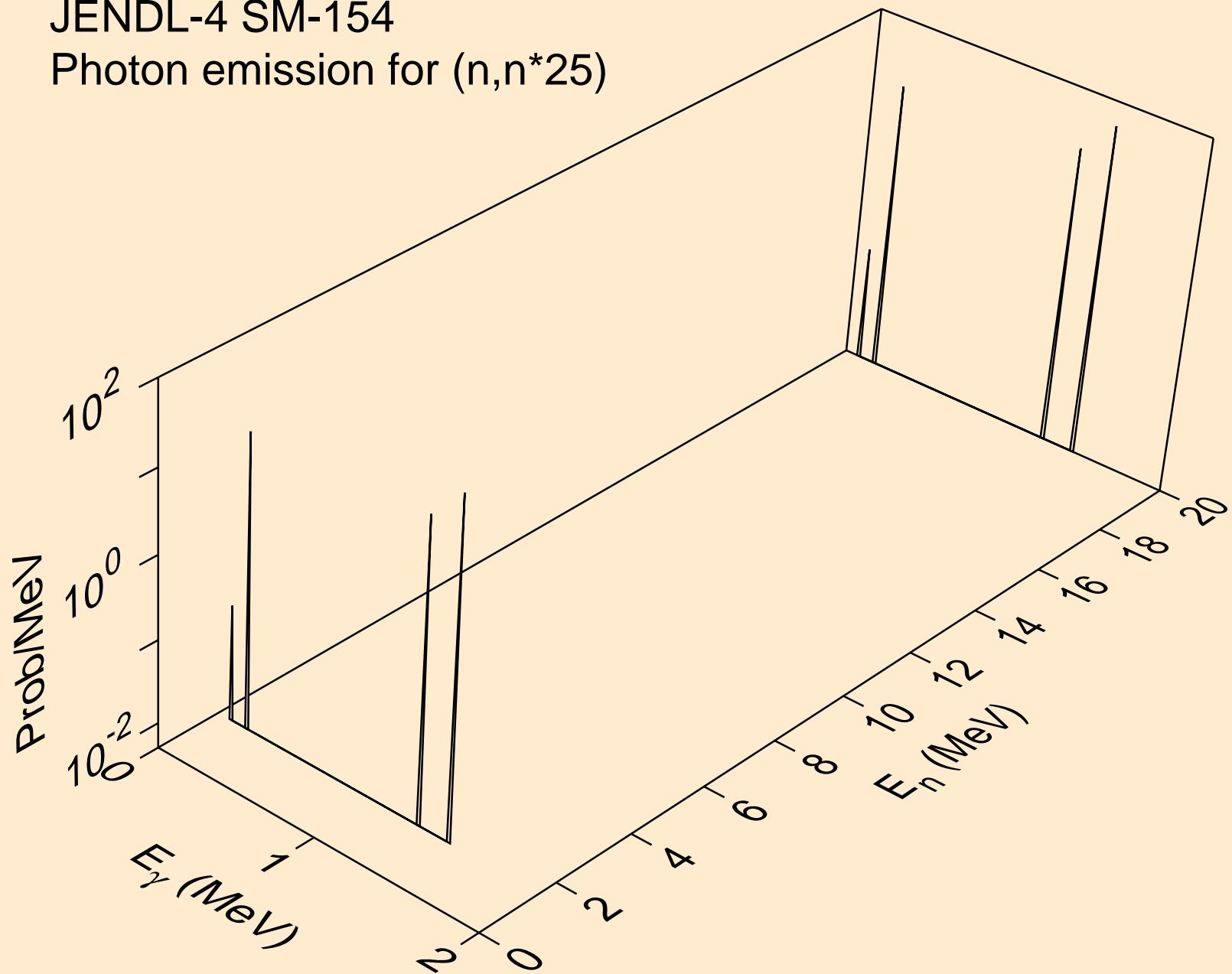
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Photon emission for ( $n, n^* 23$ )



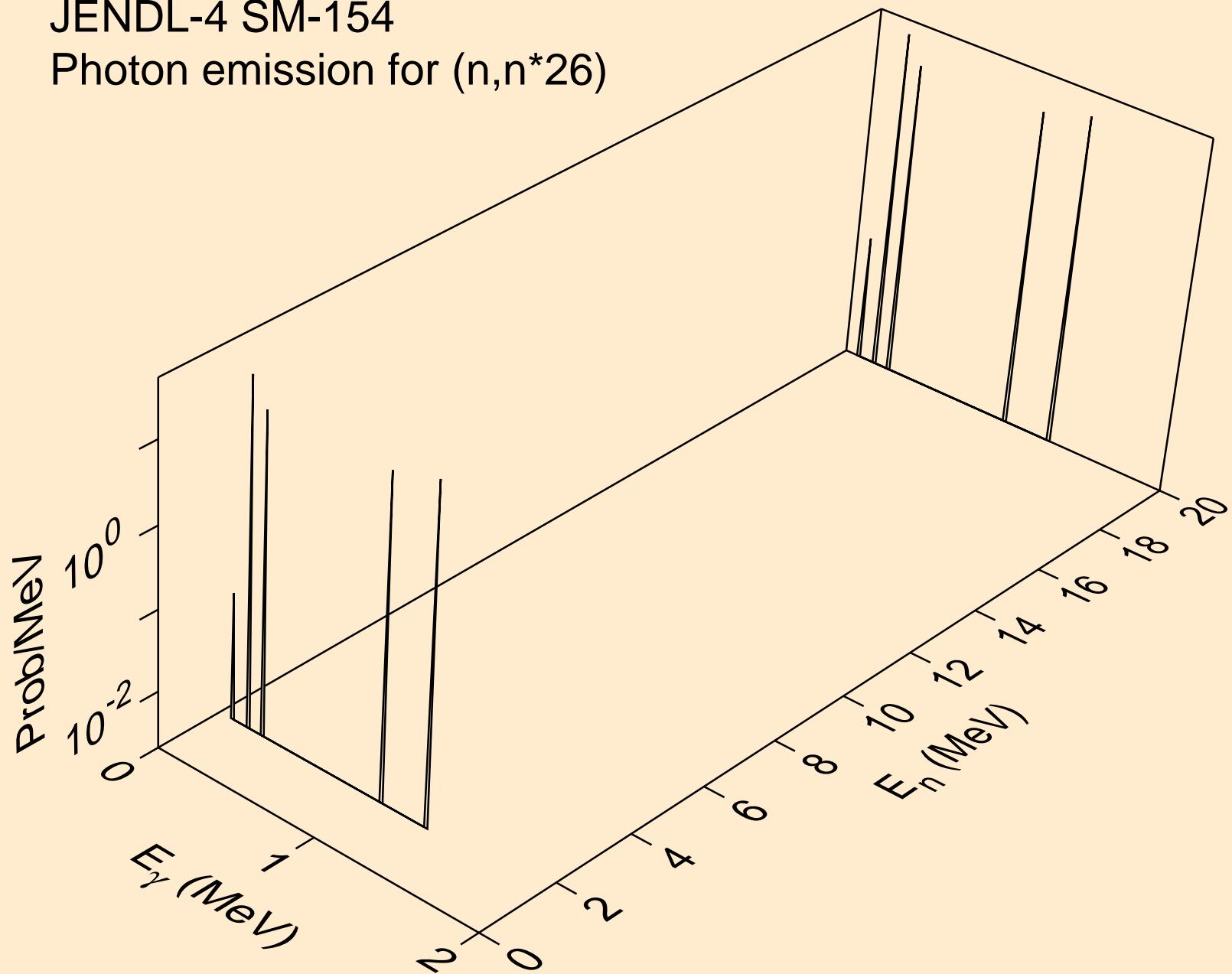
JENDL-4 SM-154  
Photon emission for ( $n, n^* 24$ )



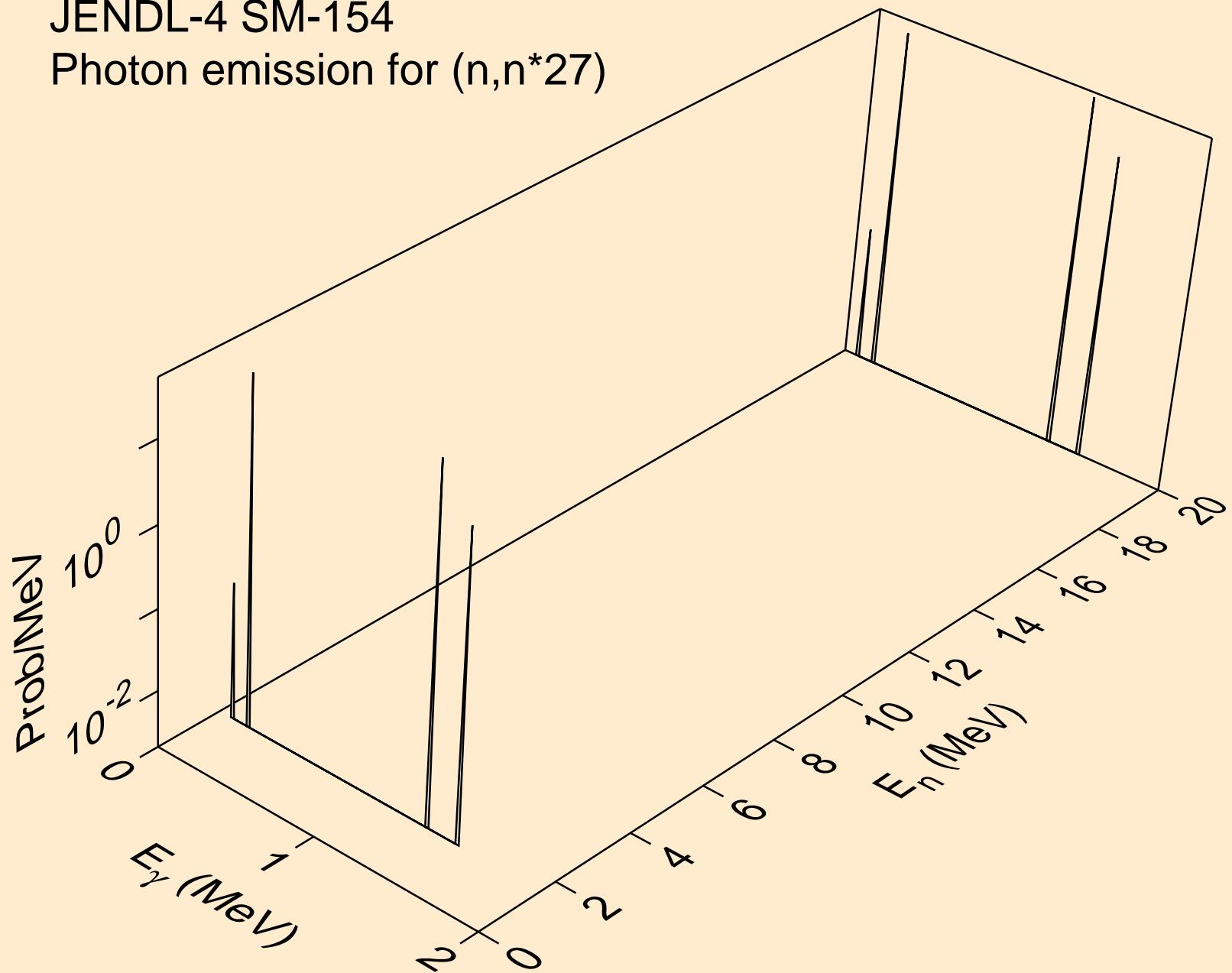
JENDL-4 SM-154  
Photon emission for ( $n, n^*$ )25



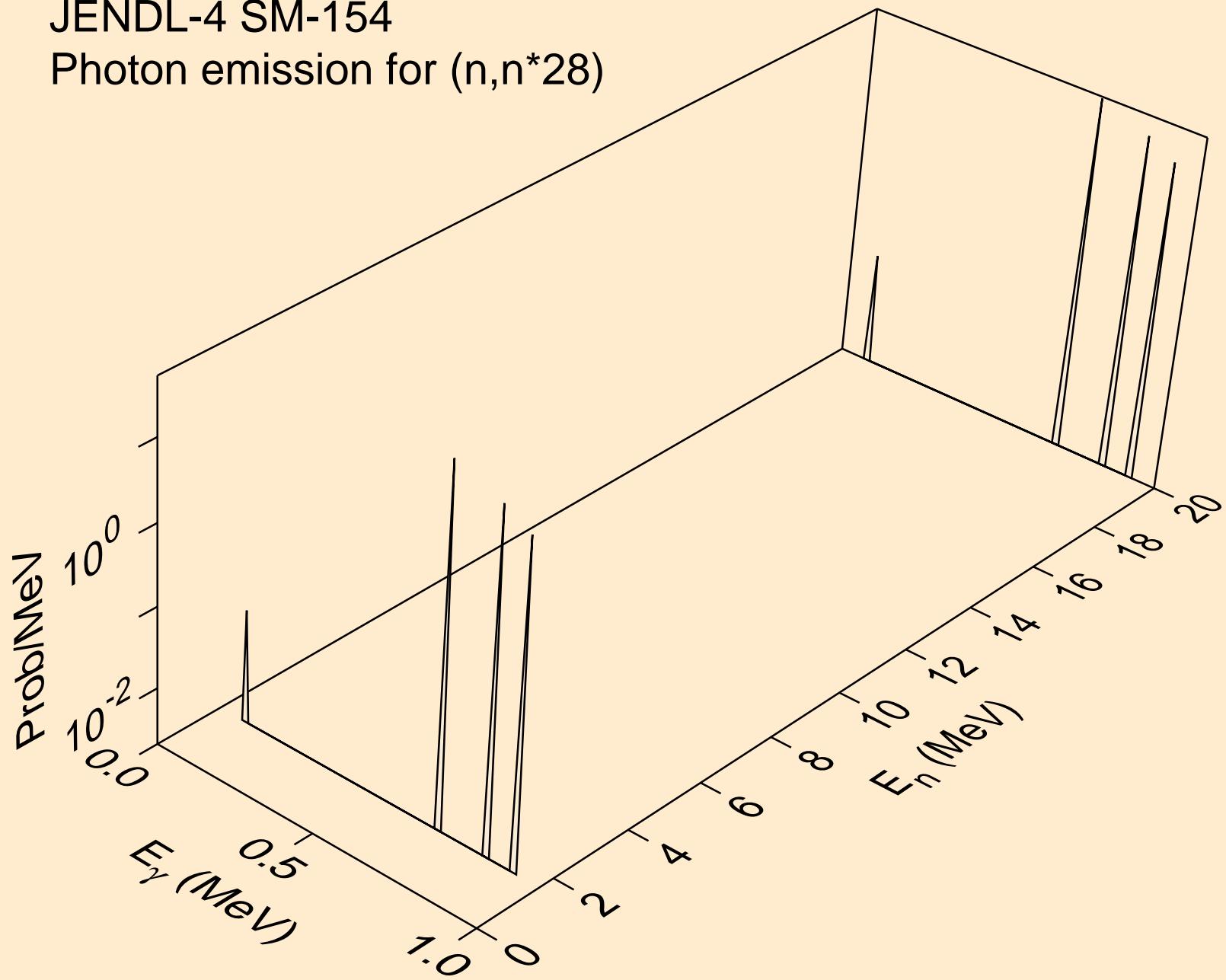
JENDL-4 SM-154  
Photon emission for  $(n,n^*26)$



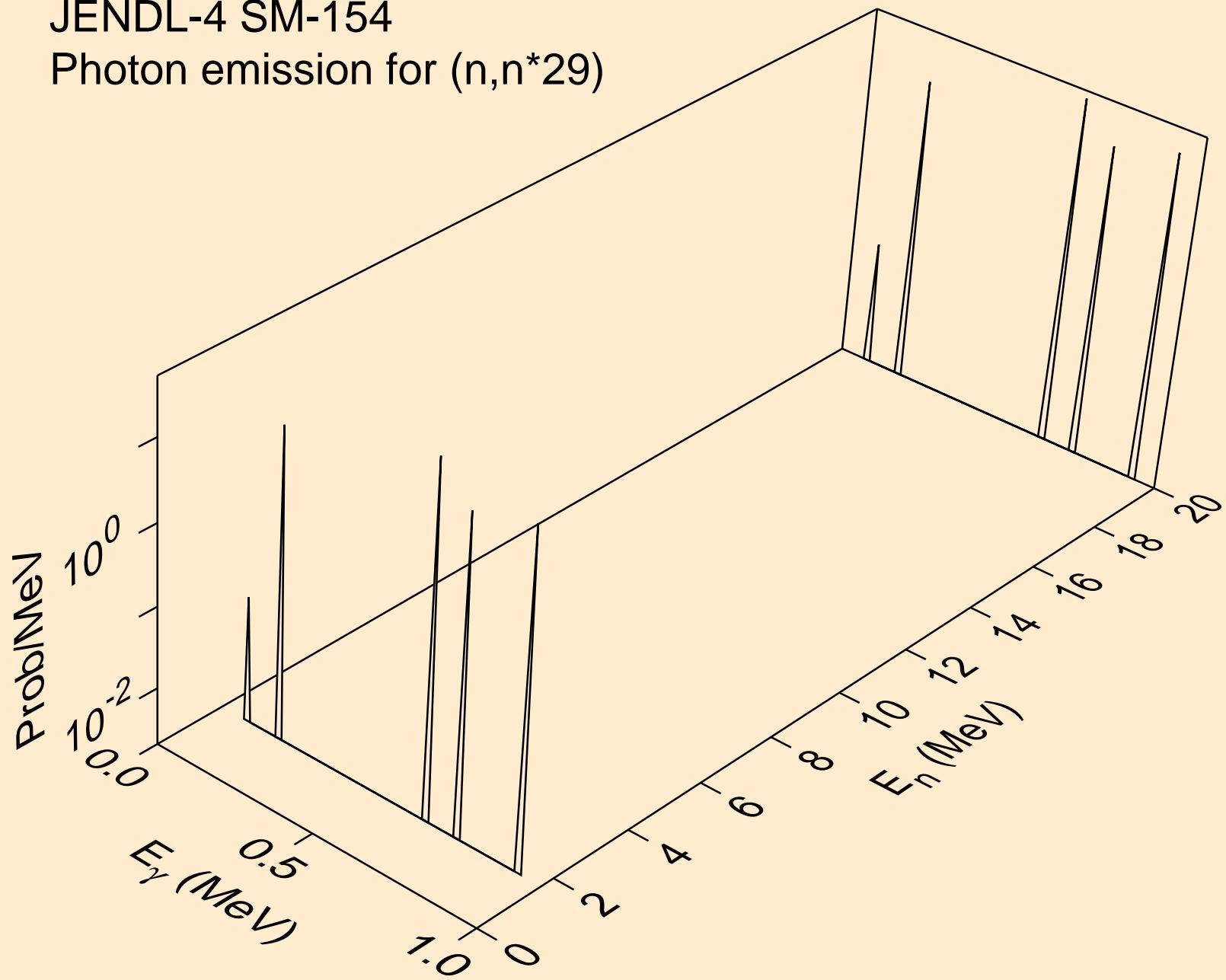
JENDL-4 SM-154  
Photon emission for ( $n, n^* 27$ )



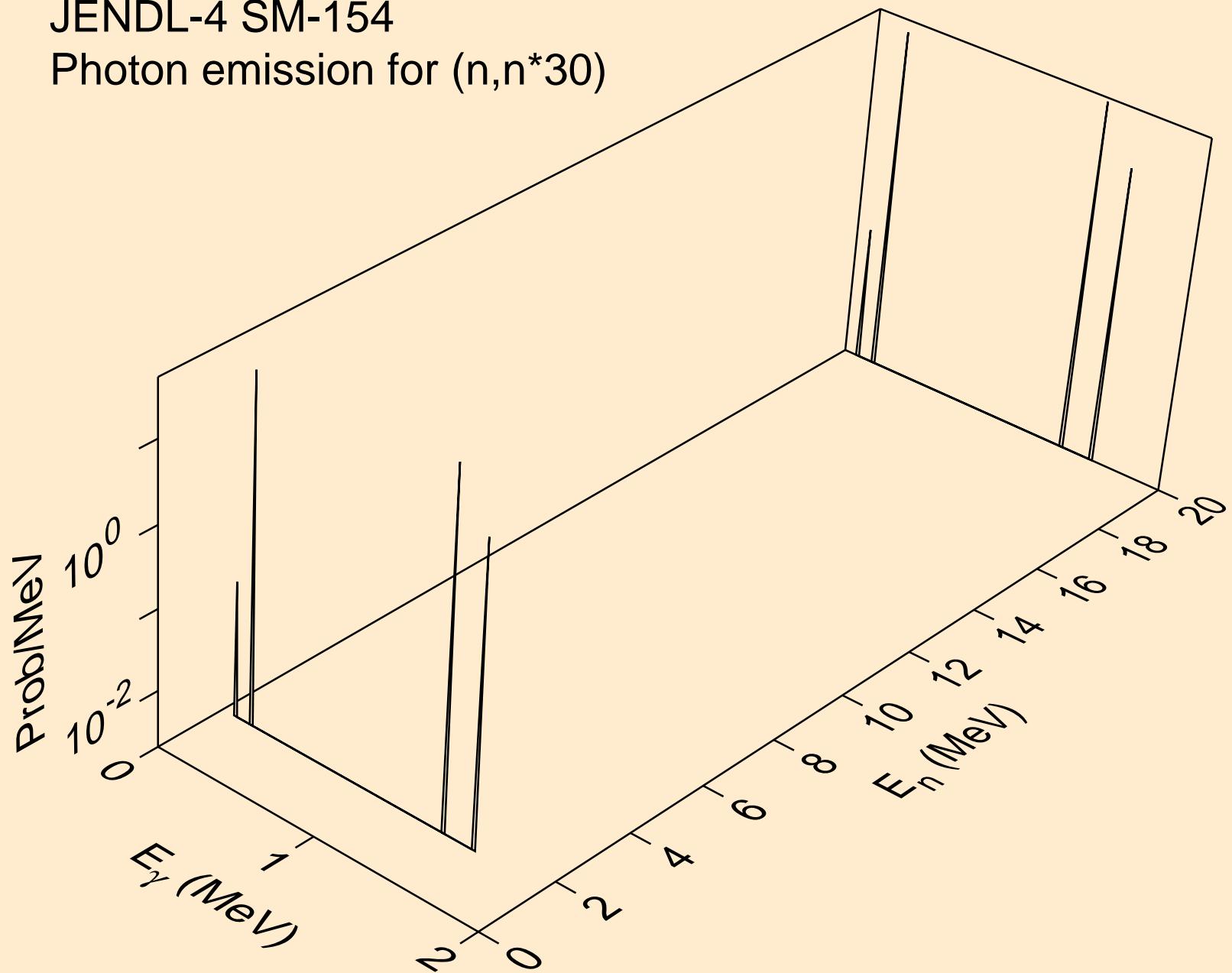
JENDL-4 SM-154  
Photon emission for ( $n, n^* 28$ )



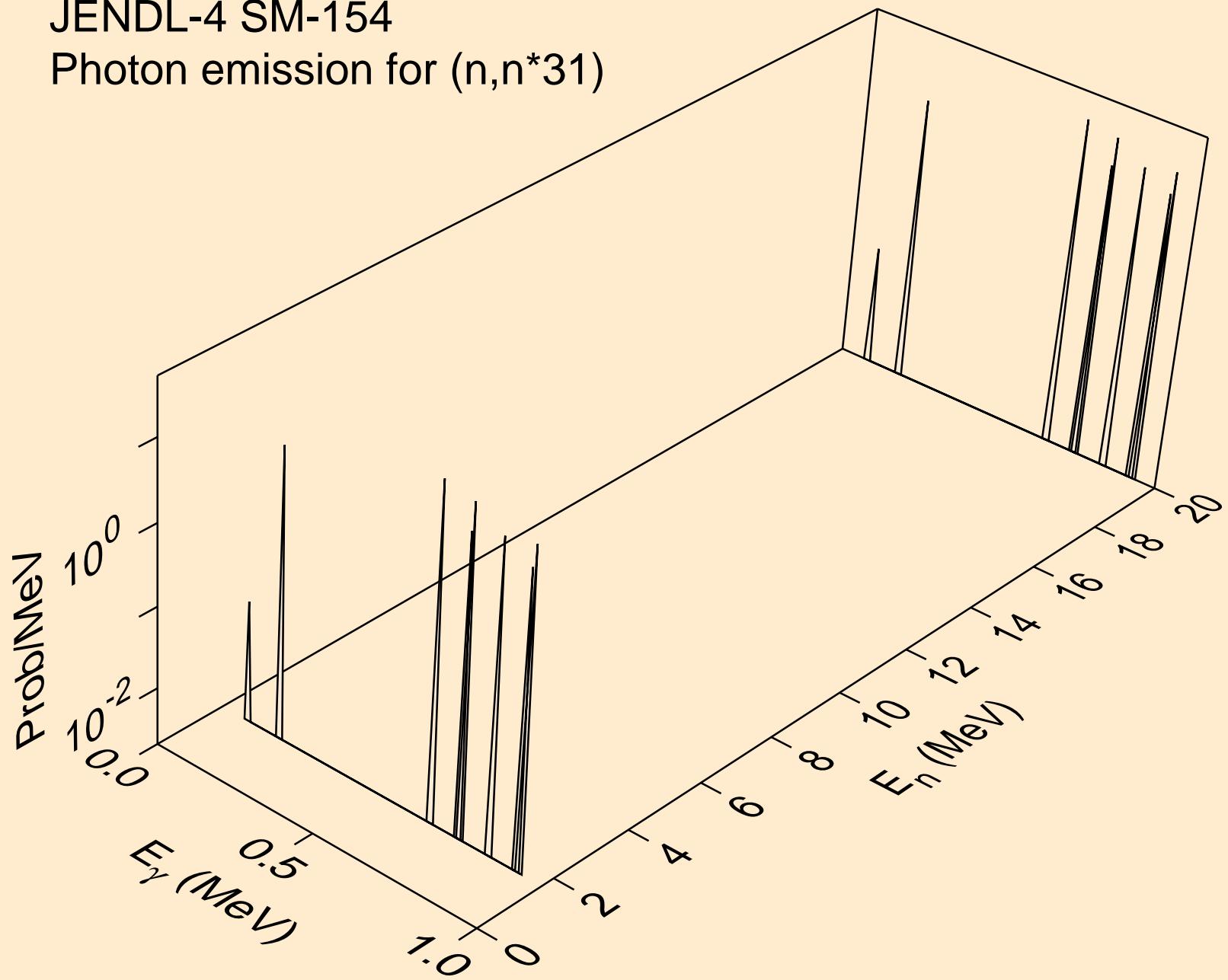
JENDL-4 SM-154  
Photon emission for ( $n, n^* 29$ )



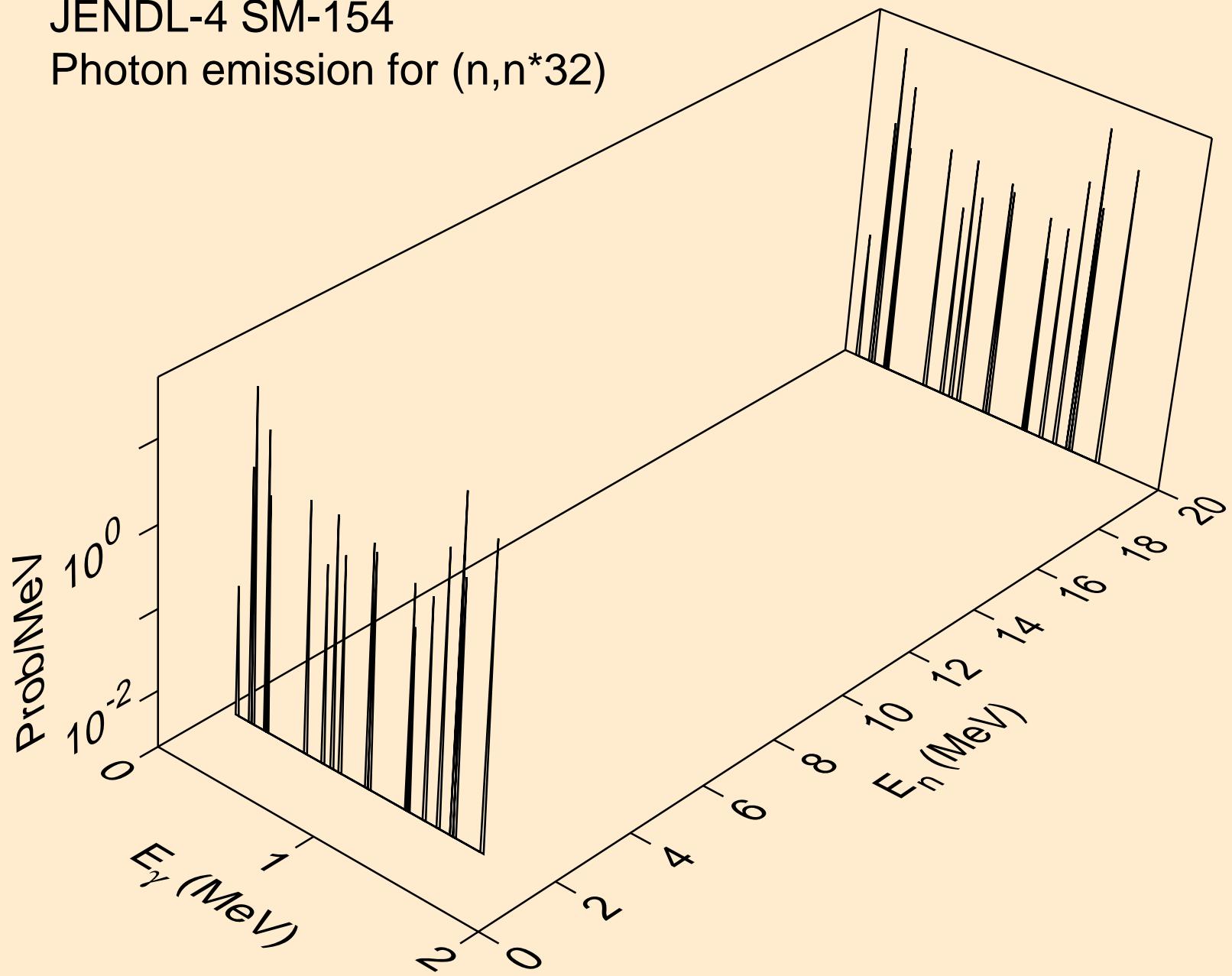
JENDL-4 SM-154  
Photon emission for ( $n,n^*$ )30



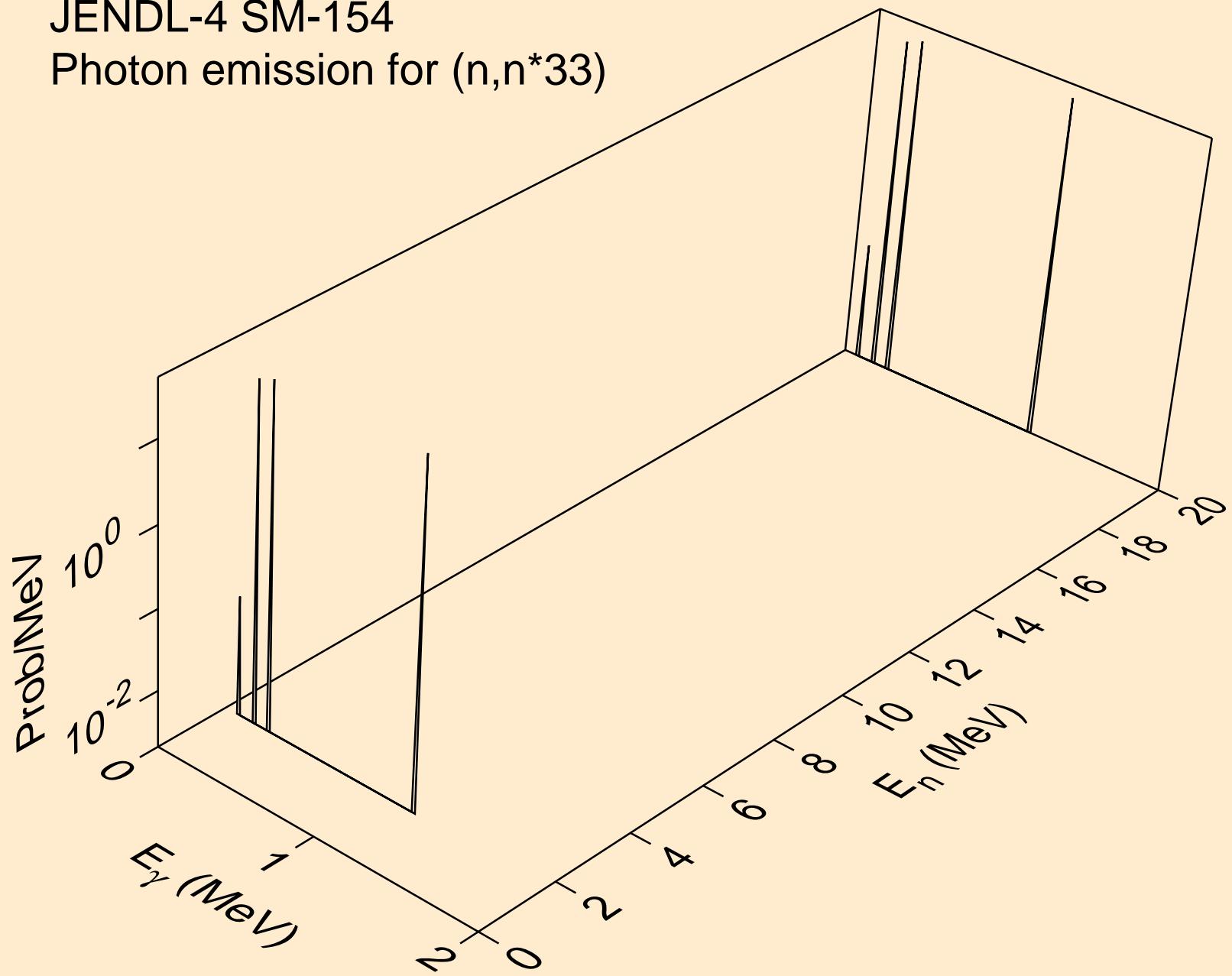
JENDL-4 SM-154  
Photon emission for (n,n\*31)



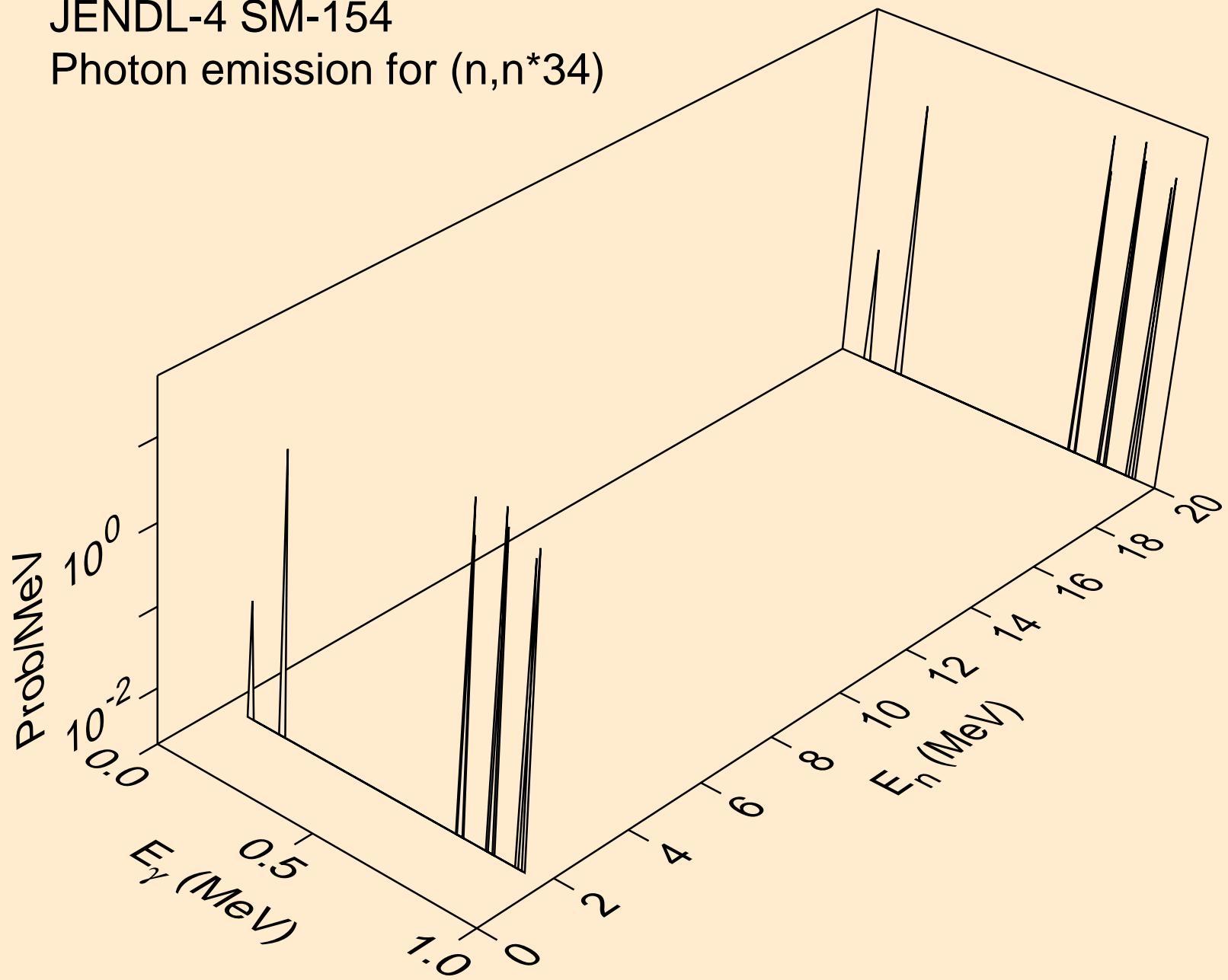
JENDL-4 SM-154  
Photon emission for ( $n, n^* 32$ )



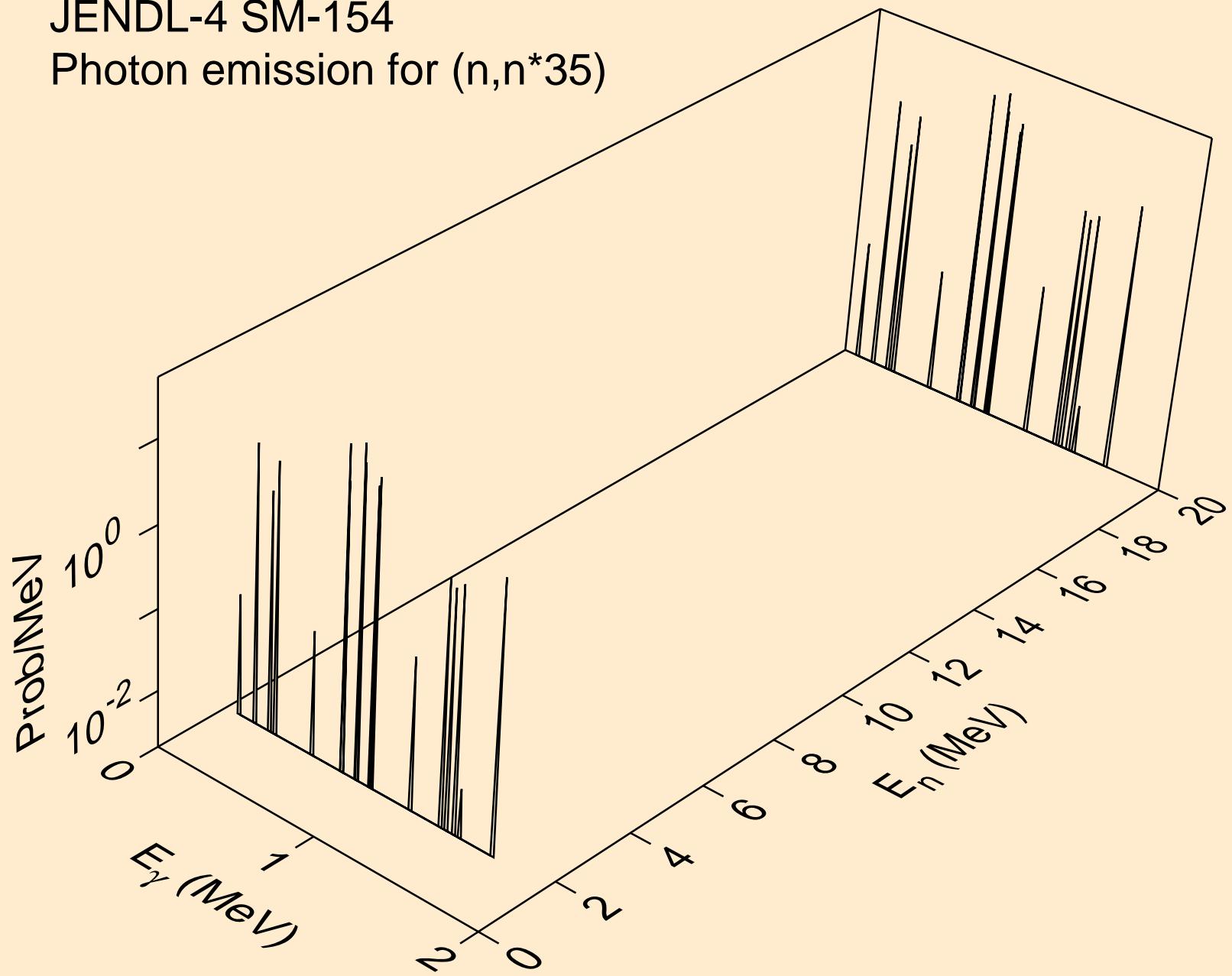
JENDL-4 SM-154  
Photon emission for ( $n, n^* 33$ )



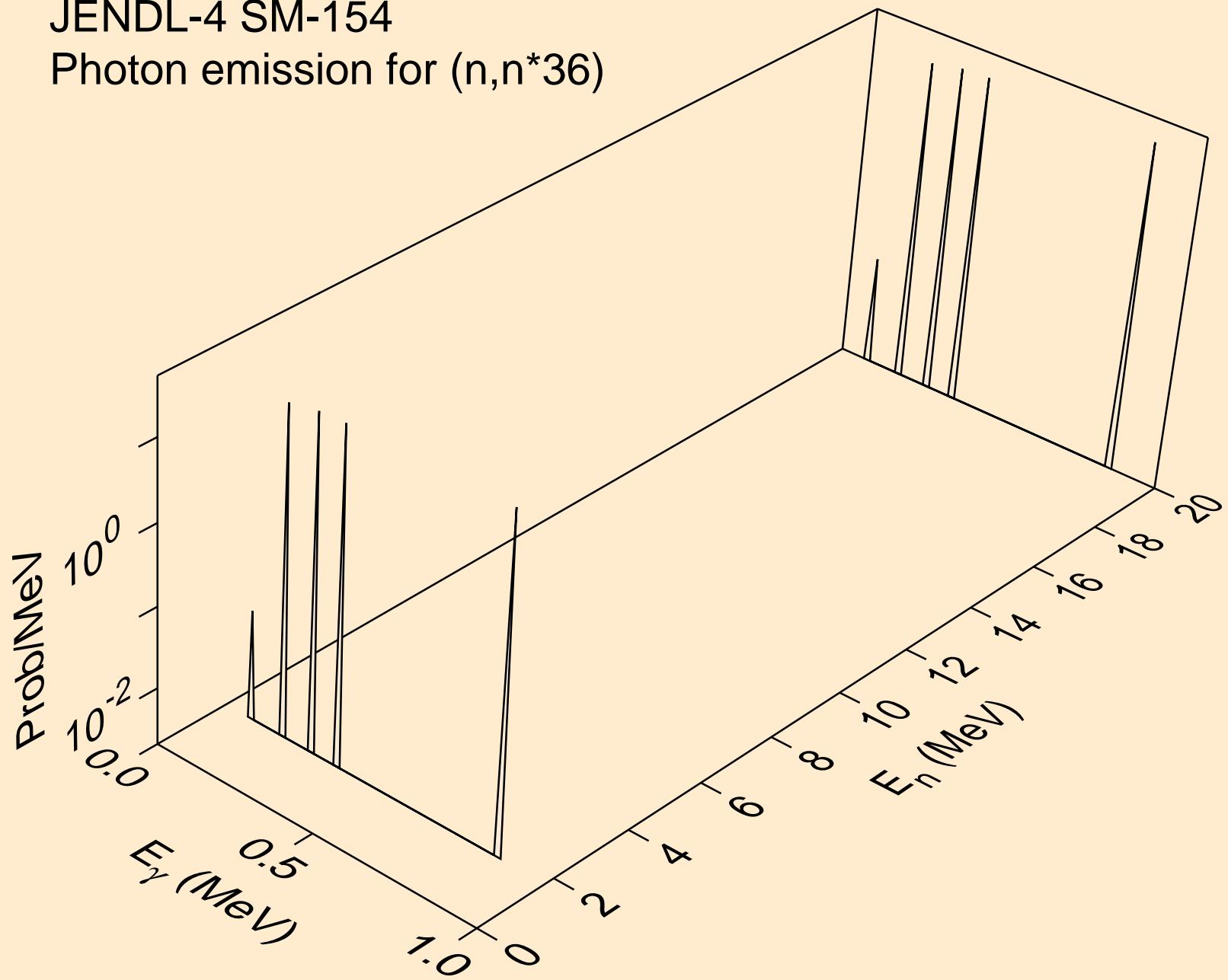
JENDL-4 SM-154  
Photon emission for ( $n, n^* 34$ )



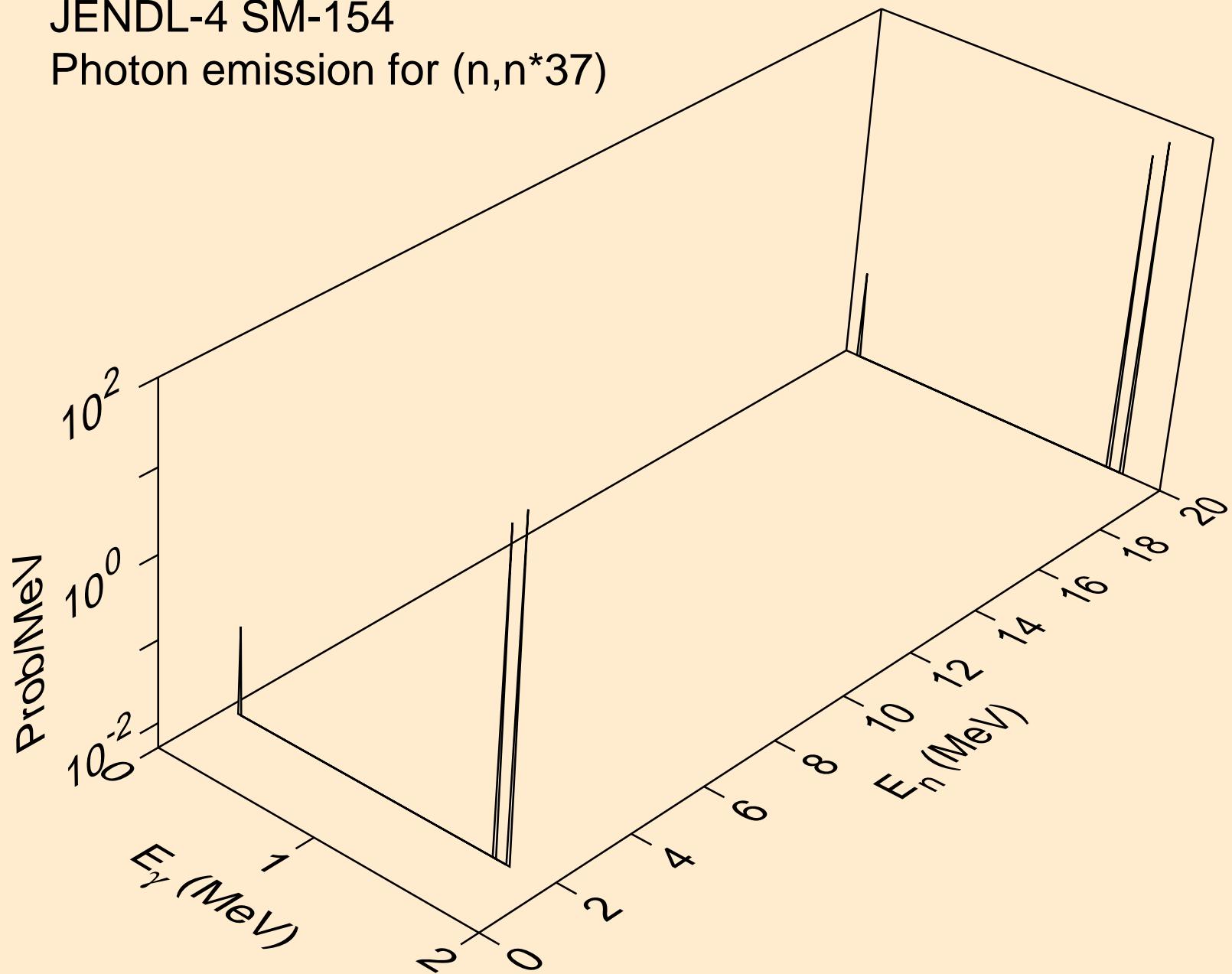
JENDL-4 SM-154  
Photon emission for ( $n, n^*$ )<sup>35</sup>



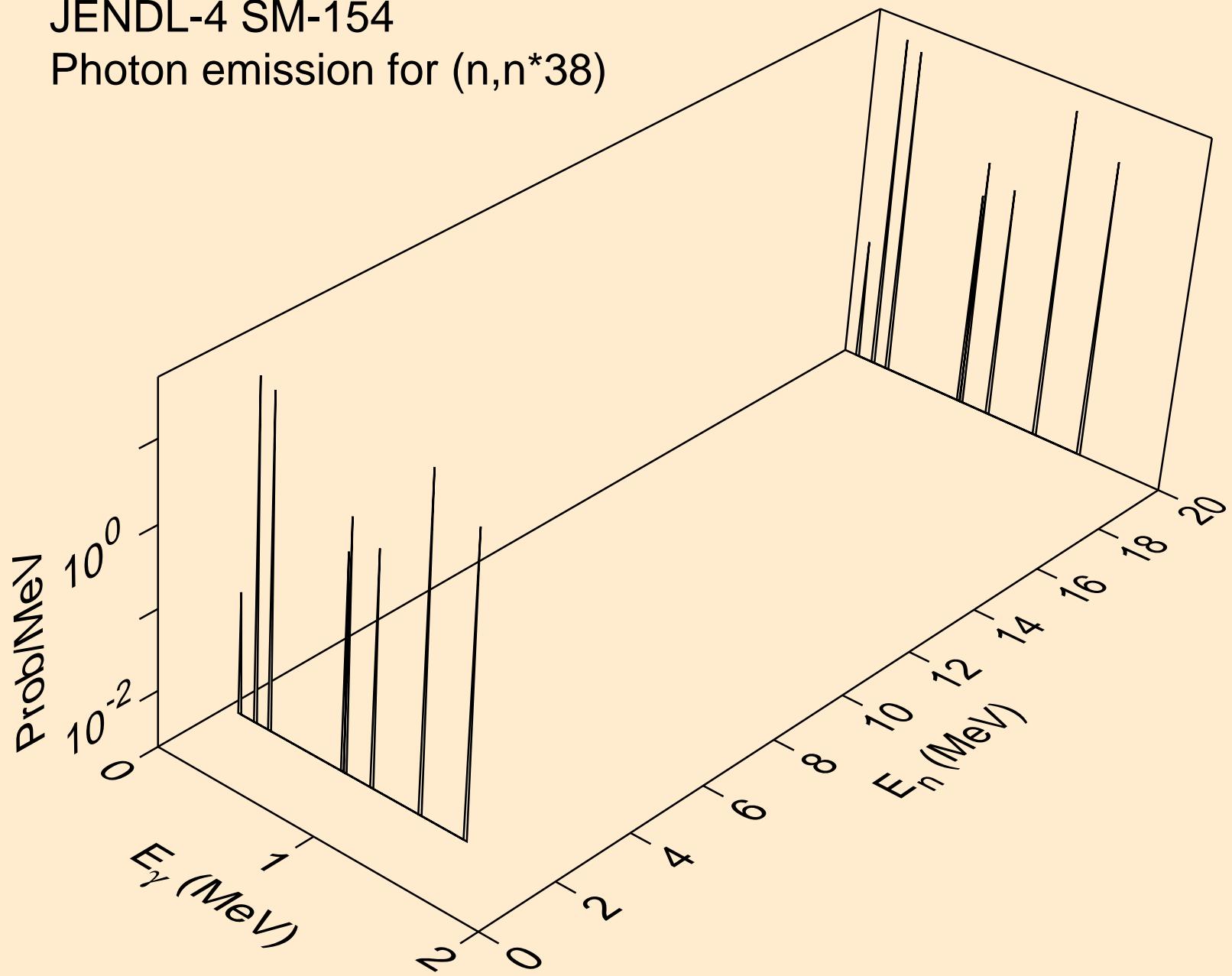
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Photon emission for ( $n, n^* 36$ )



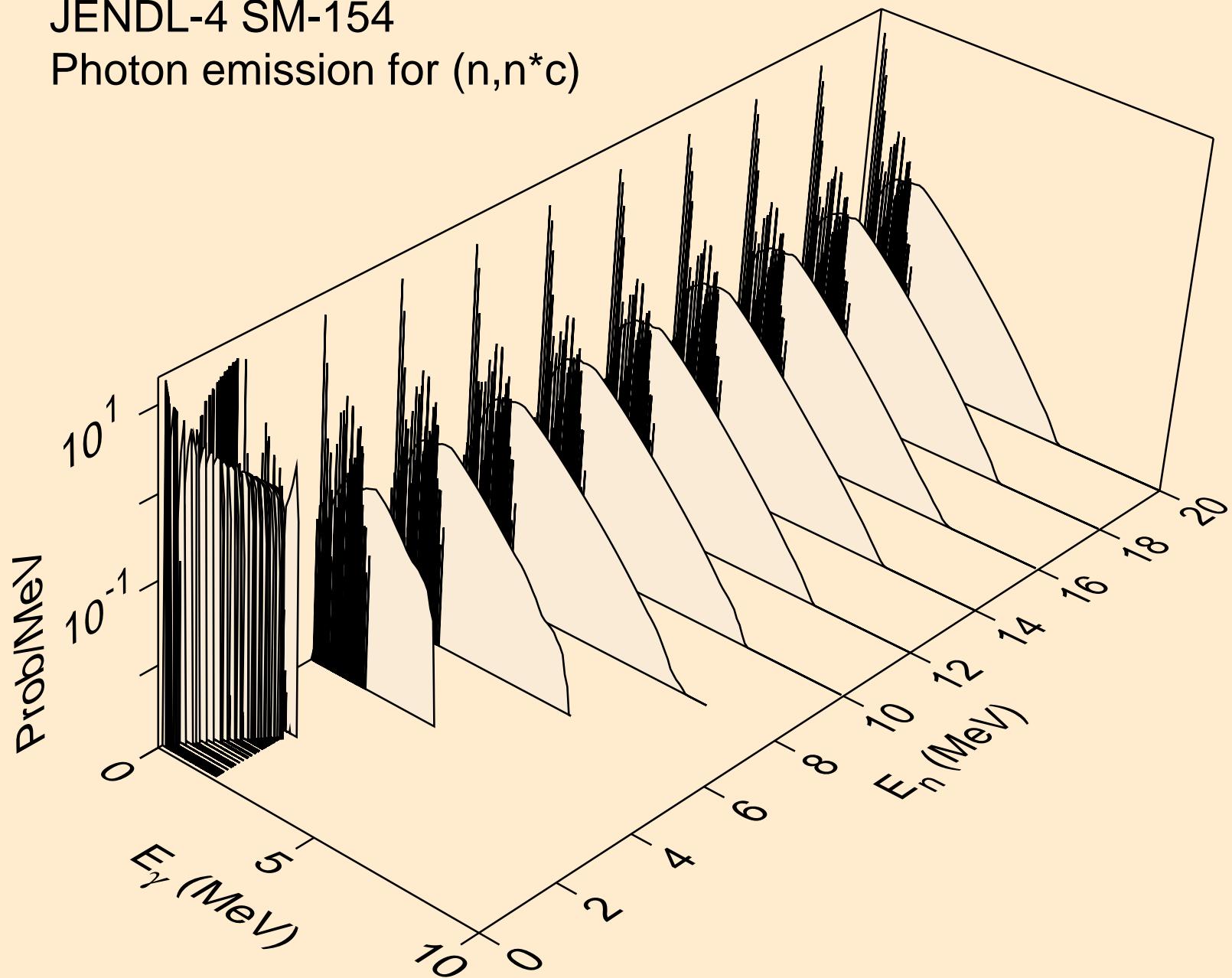
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Photon emission for ( $n, n^* 37$ )



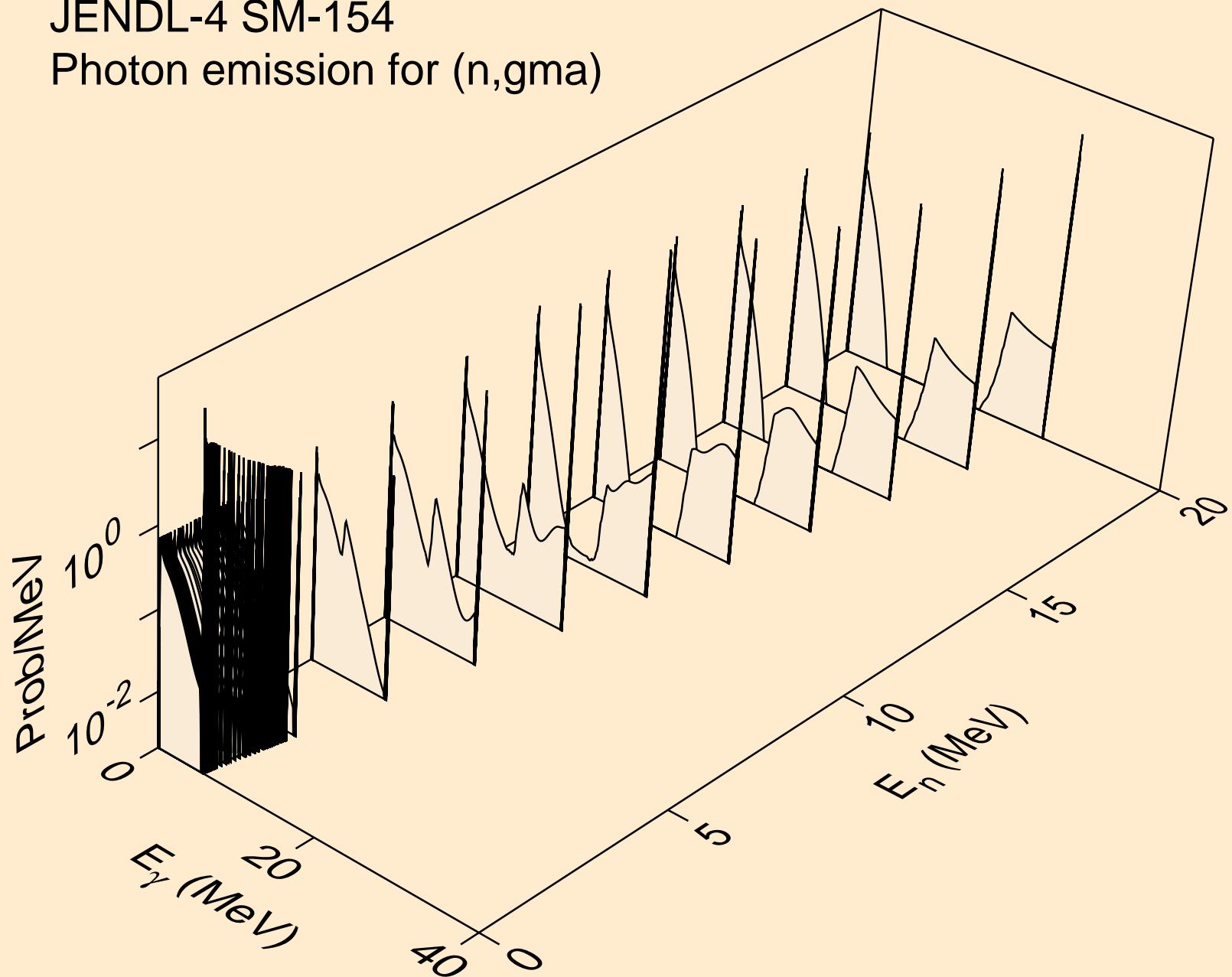
JENDL-4 SM-154  
Photon emission for ( $n, n^*$ )38



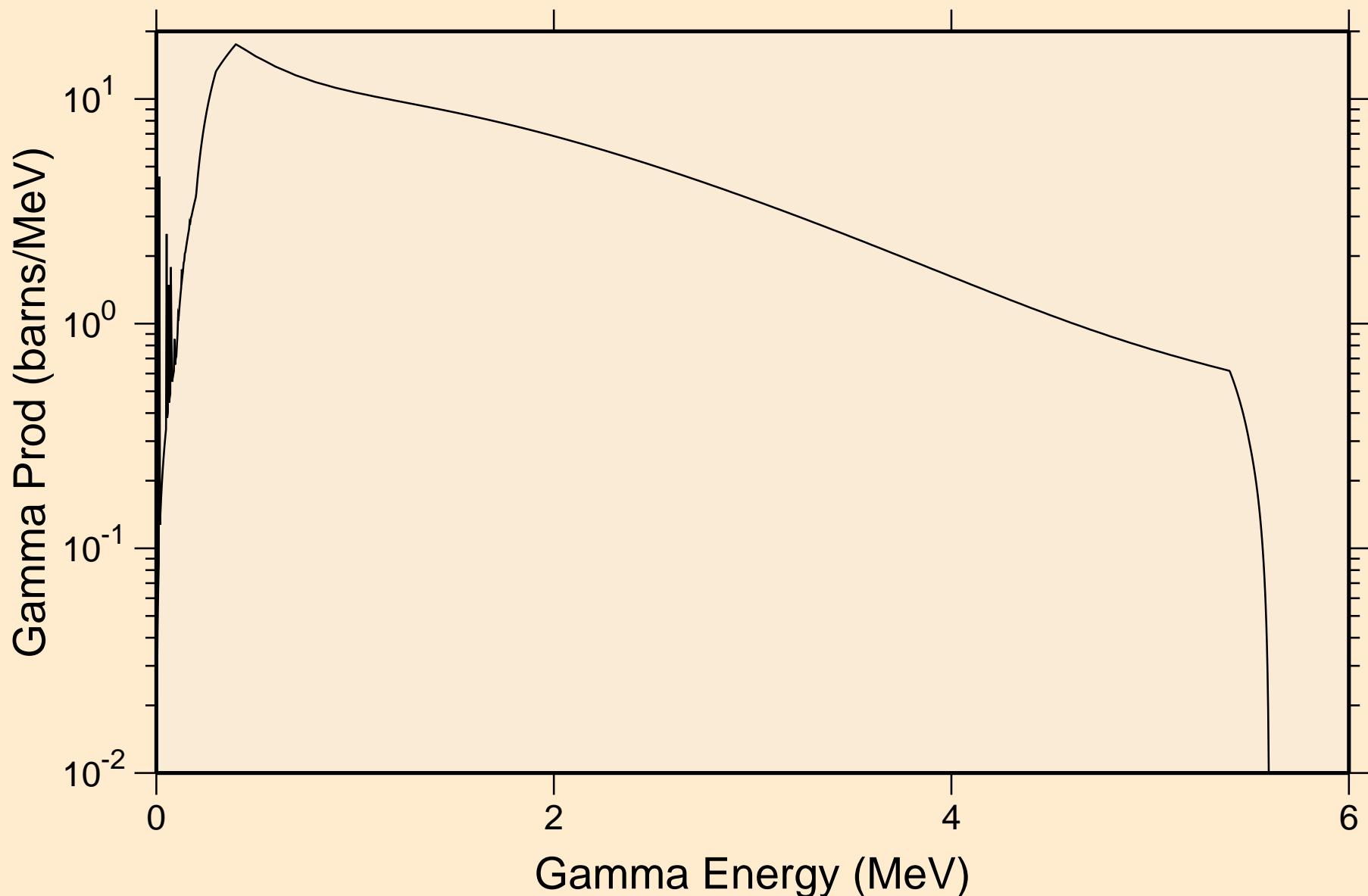
JENDL-4 SM-154  
Photon emission for  $(n,n^*c)$



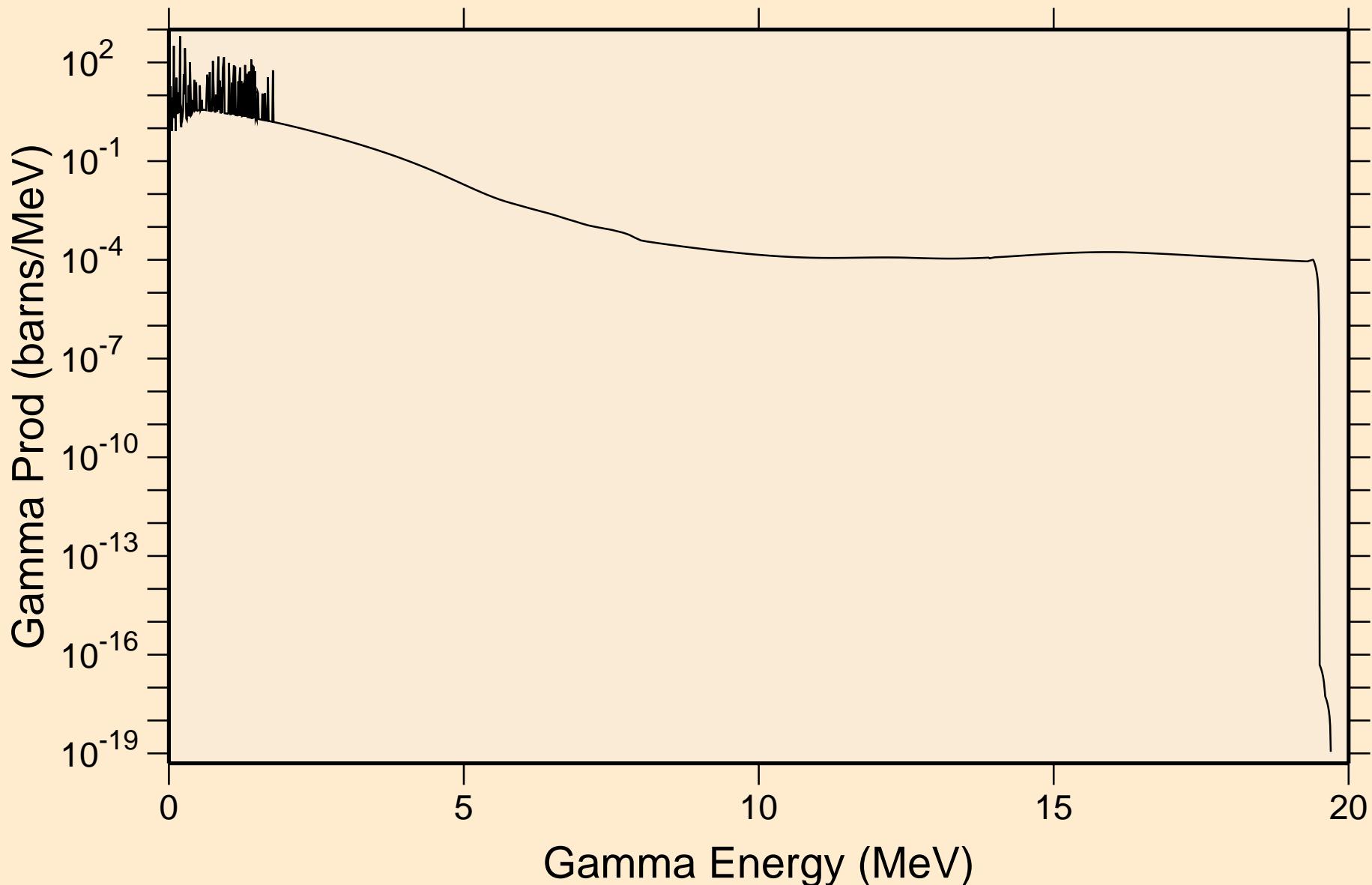
JENDL-4 SM-154  
Photon emission for (n,gma)



JENDL-4 SM-154  
thermal capture photon spectrum

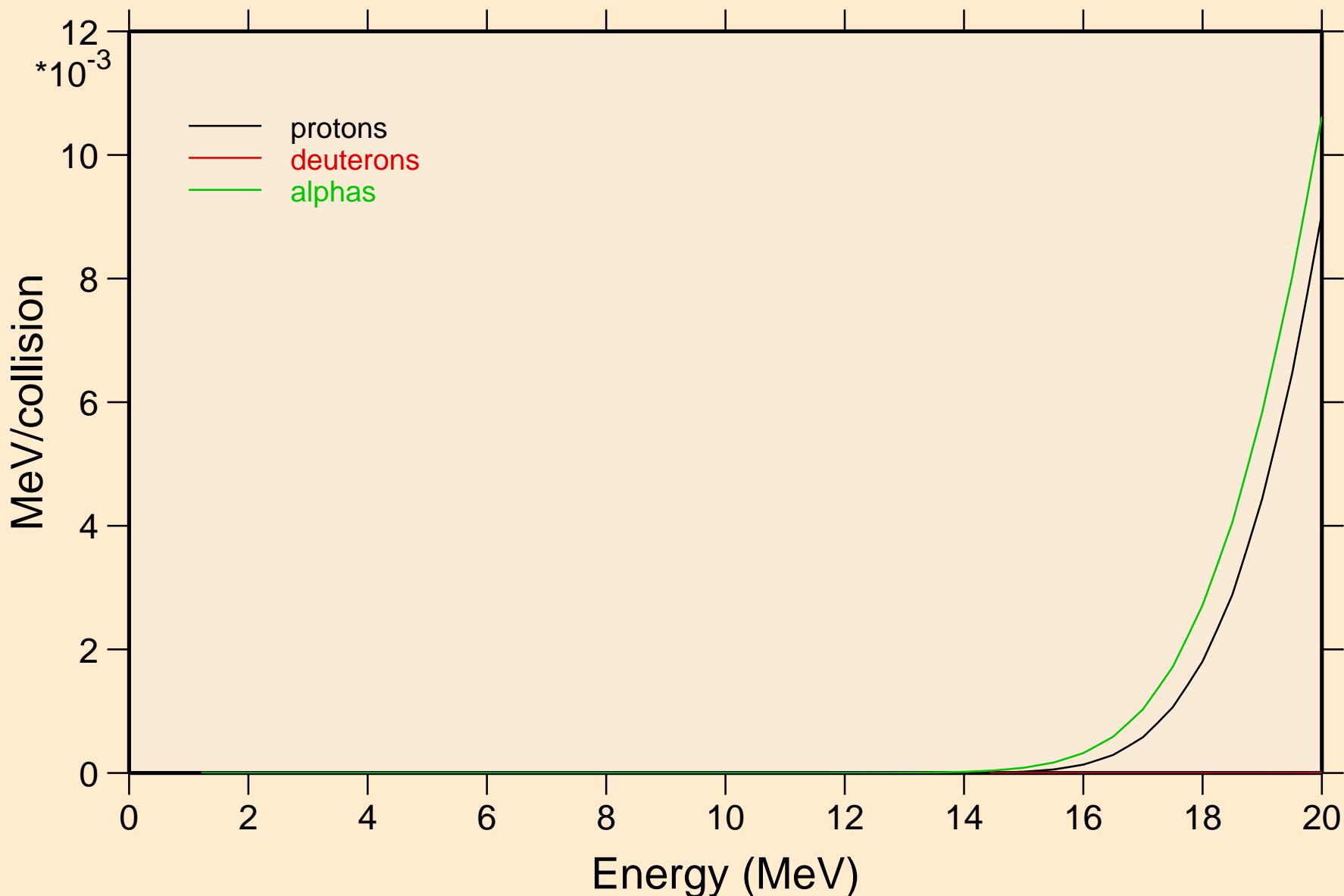


JENDL-4 SM-154  
14 MeV photon spectrum



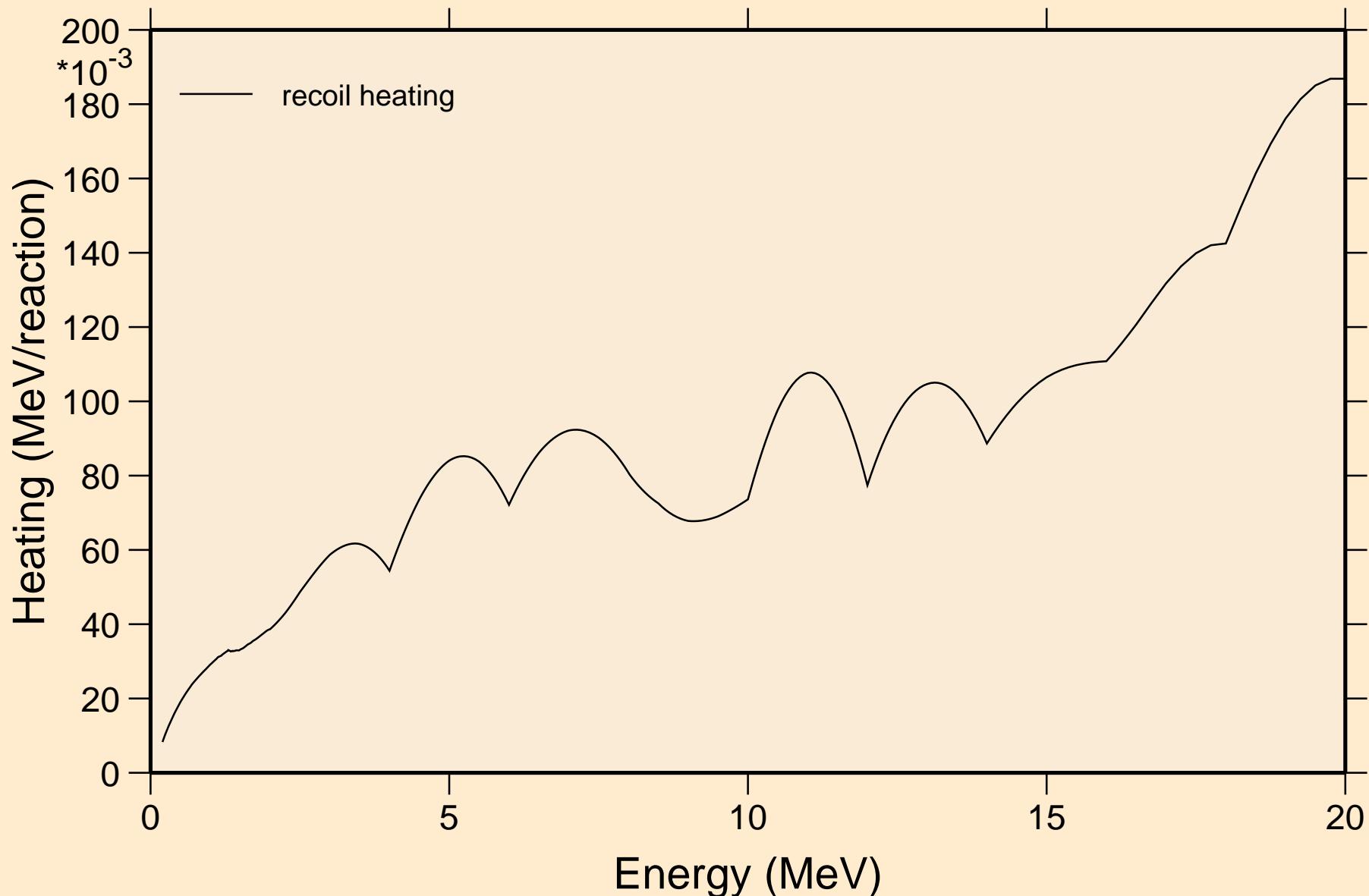
# JENDL-4 SM-154

## Particle heating contributions



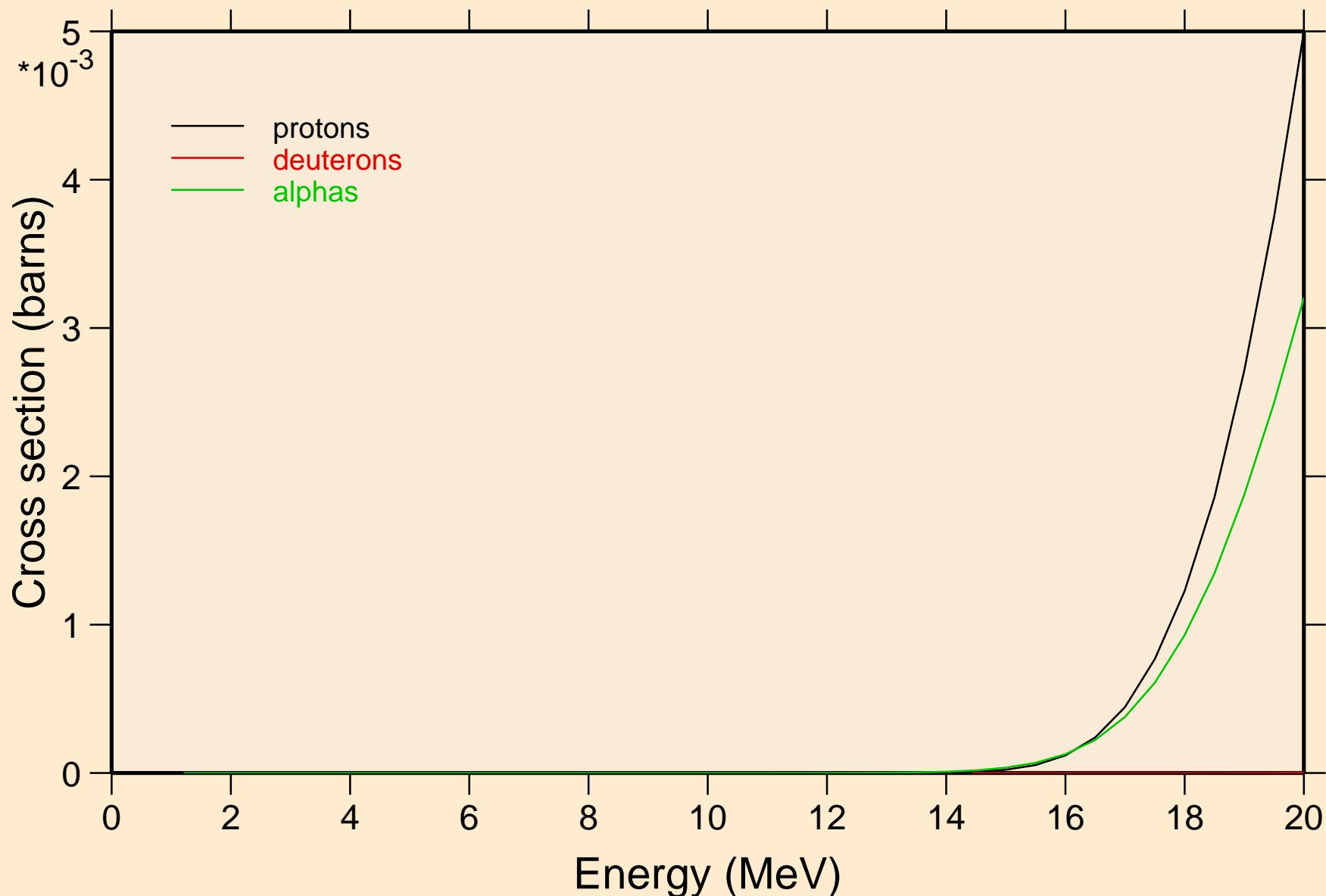
# JENDL-4 SM-154

## Recoil Heating

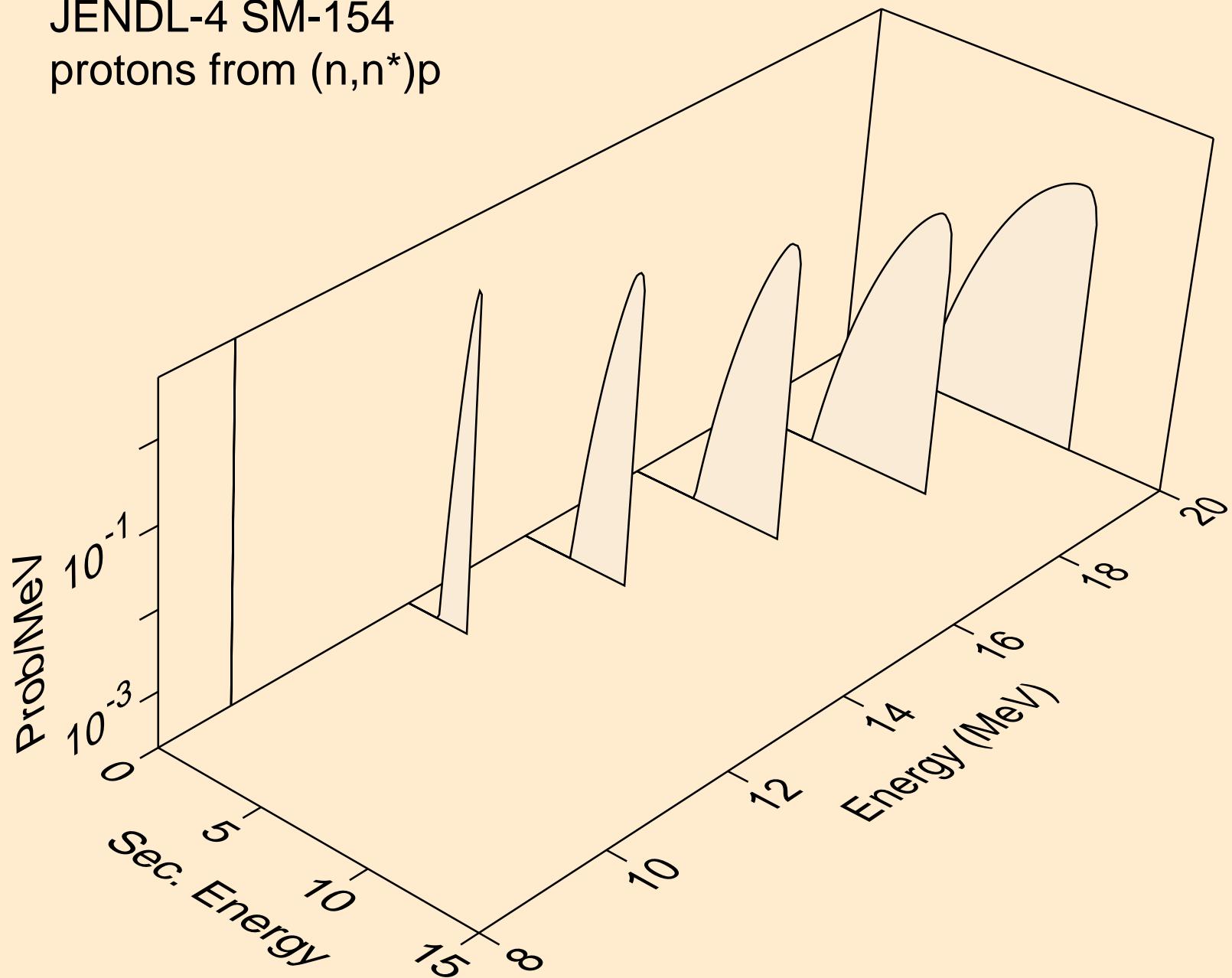


# JENDL-4 SM-154

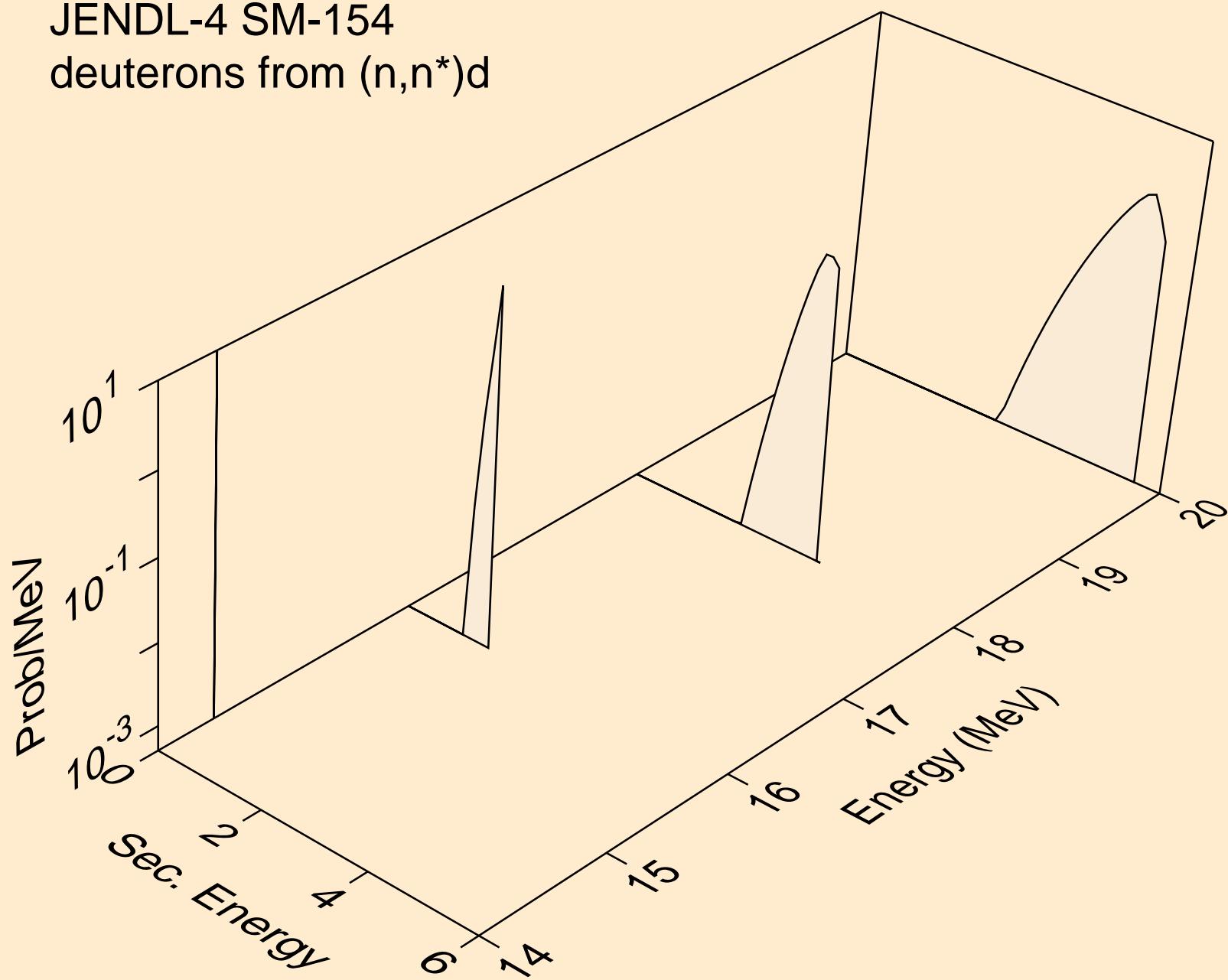
## Particle production cross sections



JENDL-4 SM-154  
protons from  $(n,n^*)p$



JENDL-4 SM-154  
deuterons from  $(n,n^*)d$



JENDL-4 SM-154  
alphas from  $(n,n^*)a$

